2022 Score: A-Leadership Level



2022 Carbon Disclosure Project (CDP) Climate Change Disclosure

As Southern Company works to achieve a net zero carbon future, we remain committed to our core principles of providing clean, safe, reliable and affordable energy to our customers and communities, while conserving and protecting the environment for future generations. We are actively engaging stakeholders, including our customers and stockholders, in productive, transparent conversations around our strategic planning and decarbonization actions as we continue to deliver value and growth.

We appreciate the continued investor focus on company disclosures aligned with the framework recommended by the Task Force on Climate-Related Financial Disclosures (TCFD), and as such, Southern Company has submitted a response to the CDP Climate Change survey for the 2021 reporting year. The response includes third-party verification/assurance of reported Scope 1 and 2 emissions, significant expansion of Scope 3 emissions reporting, and disclosure of the revenue shares associated with zero and low-carbon generation. In addition, we describe our robust enterprise risk management framework, transition and scenario-based resource planning, and physical risk assessments, which support energy security in a net zero future.

Southern Company has established a greenhouse gas emission (GHG) goal of net zero by 2050, with an interim 2030 target of 50% reduction from 2007 levels. We reduced Scope 1 GHG emissions by 47% compared to 2007 in 2021 and expect to reach a sustainable reduction of 50% by 2025. A decarbonization study completed for our natural gas subsidiary detailed opportunities for the natural gas distribution companies to reach net zero direct GHG emissions, including methane emissions, by 2050, and support reductions of GHG emissions across the value chain.

The Southern Company system has transitioned from an electric generating mix of 69% coal and 16% natural gas in 2007 to a mix of 21% coal and 48% natural gas in 2021. Our electric operating companies have filed notices with state environmental agencies to retire or convert to natural gas all but eight coal-fired generating units by the end of 2028, down from 66 units in 2007, with further reductions proposed by 2035.

Our energy mix from zero and low-carbon resources was 31%, with 16% from nuclear and 15% from renewables/other, hydropower, and biomass and landfill gas, and which includes power purchase agreements (non-company owned assets). The Southern Company system added 1,100 MW of renewable generation and energy storage, including projects at our regulated and unregulated subsidiaries.

We encourage the reader to use the following survey response, as well as the resources in the Sustainability section of our website, to learn more about our business and Southern Company's plans for achieving a net zero future.

Environmental, Social and Governance Reports



Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C_{0.1}

(C0.1) Give a general description and introduction to your organization.

Southern Company is a leading energy company, which, through its subsidiaries, has 43,000 megawatts (MW) of generating capacity and 777 billion cubic feet of natural gas throughput volume serving nine million customers. The Company provides clean, safe, reliable & affordable energy through electric operating companies in three states, natural gas distribution companies in four states and complementary natural gas businesses, a competitive generation company serving wholesale customers across America, a leading distributed energy infrastructure company, a fiber optics network and telecommunications service business. For more than a century, Southern Company has been building the future of energy, delivering the energy resources & solutions our customers & communities need to drive growth & prosperity.

Southern Company is a holding company that conducts its business through its subsidiaries. Accordingly, unless the context otherwise requires, references in this document to Southern Company's operations, such as generating activities and greenhouse gas (GHG) emissions, refer to those operations conducted through its subsidiaries. In this document, the terms we, us, our, Southern, SO and the Company all refer to the Southern Company system.

Southern Company is committed to meeting customers' current and future energy needs, with setting a long-term goal to transition to net-zero GHG emissions from enterprise-wide operations by 2050 and an intermediate goal to reduce GHG emissions from 2007 levels by 50% by 2030. At the end of 2021, we reduced Scope 1 GHG emissions 47% from 2007. We are committed to transparency in our reporting and in recent years have expanded our Scope 3 reporting. We continue to evaluate opportunities to expand our emissions reporting.

Our strategy is composed of three key pillars to drive our GHG emissions reductions:

- A diverse energy resource portfolio to include low- and no-carbon resources, negative carbon solutions & energy efficiency resources
- Industry-leading research & development (R&D), focusing on technologies that benefit customers & lower GHG emissions
- Constructive engagement with policymakers & others to support outcomes that lead to a net zero future

We have made progress with a full portfolio approach to electric generation resource diversity, focused on maintaining reliability, resilience and affordability while reducing GHG emissions. The Southern Company system has transitioned from an electric generating mix of 69% coal and 16% natural gas in 2007 to a mix of 21% coal and 48% natural gas in 2021. Our energy



mix from zero and low carbon resources was 31% in 2021, with 16% from nuclear and 15% from renewables, hydropower, and biomass and landfill gas, and which includes power purchase agreements (non-company owned assets).

Our subsidiary, Southern Company Gas, is committed to supporting Southern Company's net-zero goal in its operations. Southern Company Gas is a founding member in Our Nation's Energy (ONE) Future. Our natural gas distribution operation's fugitive methane intensity for 2021 using the ONE Future methodology is 0.195%, well below ONE Future's 2025 goal of 0.44% for local distribution companies. In addition, Southern Company Gas is deploying a wide range of initiatives like infrastructure modernization, evaluation of opportunities to deploy renewable natural gas and hydrogen, and programs that empower customers to reduce their own emissions.

Our R&D organization leverages a robust, diverse, proprietary research portfolio and collaborates with the U.S. government, other utilities, academia and industry on new technologies for energy production, delivery & use for a net-zero energy future.

We are engaging with policymakers, investors, customers & other stakeholders to help shape an energy policy that enhances optionality across the entire energy value chain and supports the development and deployment of more carbon-free energy sources, while ensuring each state we serve retains the ability to adequately plan and deploy resources that meet the needs of its citizens and communities.

We are fixed on the idea of "yes, and...." Yes, we acknowledge the challenge of net zero, and we are committed to finding solutions. Our path toward net zero includes continued coal transition, utilization of natural gas to enable fleet transition, aggressively growing our investment in renewable energy, modernizing the grid, completing construction and bringing online the first new nuclear generating units in a generation, solving energy challenges through robust R&D, incorporating negative carbon solutions, and investing in energy efficiency for savings on both sides of the meter.

As we work to achieve a net zero carbon future, we remain committed to our core principles of providing clean, safe, reliable and affordable energy to our customers.

Our responses contain forward-looking information. For cautionary statements regarding forward-looking information, please go to Section 15, (C-FI).

C_{0.2}

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2021	December 31, 2021	Yes	3 years



C_{0.3}

(C0.3) Select the countries/areas in which you operate.

United States of America

C_{0.4}

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C_{0.5}

(C0.5) Select the option that describes the reporting boundary for which climaterelated impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Equity share

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation Transmission Distribution

Other divisions

Gas storage, transmission and distribution Smart grids / demand response Battery storage Micro grids

C_{0.8}

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	SO



C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board Chair	The Board Chair, who also serves as Chief Executive Officer (CEO), has direct responsibility for oversight of climate change issues, including: setting the strategy to decarbonize the system, leading strategic resource planning and associated capital allocation, setting annual budgets, evaluating unregulated low-carbon investments, leading climate-related risk assessments, assessing the impact of fleet transition on the Company's employees and the communities it serves, making decisions about investing in R&D, and assessing climate-related controls and compliance. In 2020, 2021, and 2022, the Chair engaged with stakeholders on climate-related topics, including the Climate Action 100+ investor initiative. The Chair takes this input into consideration in evaluating strategic priorities. In 2020, the Chair, in conjunction with senior executives and in consultation with the Board, updated our long-term GHG emissions reduction goal to net zero emissions by 2050 and stated that we expect to meet our interim goal to reduce enterprise-wide GHG emissions by 50% by 2030 (as compared to 2007 levels) ahead of schedule, and possibly as early as 2025. Also in 2020, under the Chair's leadership, we released a report describing our decarbonization progress. In 2021, under the Chair's leadership, we indicated our intent to reduce the number of coal fired generating units in our fleet from 18 to 8 by the end of 2028. Also in 2021, under the Chair's leadership, we announced a cooperative agreement with the U.S. Department of Energy (DOE) to design, construct and operate the Molten Chloride Reactor Experiment through which the Company's R&D will lead a collaborative effort to advance next-generation nuclear on a timescale that addresses climate change benchmarks and helps to deliver on the Company's net zero goal. The Chair leads the three-pronged strategy to achieve our goals: (1) pursue a diverse energy resource portfolio to include low-carbon and carbon-free resources, negative carbon solutions and energy efficiency resources;



Director on board

The Board's Lead Independent Director (LID). Throughout 2020, 2021 and continuing into 2022, the LID (and other members of the Board) received reports on a broad range of climate-related topics at each Board meeting. Quarterly reports on progress in achieving our GHG emission reduction goals are provided and discussed. There is quarterly reporting on Plant Vogtle Units 3 and 4 construction progress (new carbon-free nuclear generation) and robust discussions around integrated resource planning, scenario planning and analysis and its underlying assumptions. During 2020, 2021 and into 2022, the LID directly engaged with a number of our investors on climate-related topics, including investors that participate in the Climate Action 100+ initiative, which provides valuable insight into climate-related priorities and positions. The LID takes this input into consideration in evaluating and overseeing the Company's climaterelated strategic priorities. The LID led discussions of the independent Directors of the Board that resulted in the 2020 announcement of an updated long-term GHG emissions reduction goal of net zero emissions by 2050. In addition, the LID provided input and oversight in the development of Southern Company's Implementation and Action Toward Net Zero report, released in 2020.

Chief Executive Officer (CEO)

The CEO, who also serves as Board Chair, has direct responsibility for oversight of climate change issues including: setting the strategy to decarbonize the system, leading strategic resource planning and associated capital allocation, setting annual budgets, evaluating unregulated low-carbon investments, leading climaterelated risk assessments, assessing the impact of the Company's fleet transition on its employees and the communities it serves, making decisions about investing in R&D, and assessing climate-related controls and compliance. In 2020, 2021, and 2022, the CEO engaged with stakeholders on climate-related topics, including the Climate Action 100+ investor initiative. The CEO takes this input into consideration in evaluating strategic priorities. In 2018 the CEO, in conjunction with senior executives and in consultation with the Board, led the analysis, recommendation and decision to set initial interim and long-term GHG reduction goals for our electric and gas operations, developing a three-pronged strategy to achieve the goals: (1) pursue a diverse energy resource portfolio that includes lowcarbon and carbon-free resources and energy efficiency resources; (2) continue our industry-leading R&D, focusing on technologies that lower GHG emissions; and (3) constructively engage with policymakers, regulators, investors, stakeholders and customers to support outcomes that lead to a low-carbon future. In 2020, the CEO, in conjunction with senior executives and in consultation with the Board, updated the long-term goal to net zero by 2050 and stated that we expect to meet our interim goal to reduce enterprise-wide GHG emissions by 50% by 2030 (as compared to 2007 levels) ahead of schedule, and possibly as early as 2025. In 2021, under the CEO's leadership, we indicated our intent to reduce the number of coal fired generating units in our fleet from 18 to 8 by the end of 2028. In 2021, under the CEO's leadership, we announced a cooperative agreement with the DOE to design, construct and operate the Molten Chloride Reactor Experiment to advance next-generation nuclear on a timescale that helps to deliver on the Company's net zero goal. In 2020, 2021 and 2022, the CEO has made fleet



transition and decarbonization strategy a key agenda item at the Company's executive forums, meetings that occur at least two times per year with all Company officers.

Board-level committee

The Operations, Environmental and Safety (OES) Committee oversees strategy on climate-related and environmental and safety policy and planning issues, including business strategies designed to address the long-term reduction of GHG emissions, fleet transition and related risks and opportunities across the system, including net-zero carbon strategies, resource planning, emerging technologies and research and development efforts, as well as the impact on employees and communities of implementing the business strategies and operations. The OES Committee receives regular reports on a range of climate-related topics at each OES Committee meeting. The OES Committee receives regular reports on operating units' safety and environmental activities and engages in robust discussions about carbon emissions, carbon risks and strategic planning. There is quarterly reporting on Plant Vogtle Units 3 and 4 construction progress (new carbon-free nuclear generation) and robust discussions around integrated resource planning, scenario planning and analysis and its underlying assumptions. Quarterly reports on progress in achieving our GHG emission reduction goals are provided and discussed. In 2019 and 2020, the OES Committee began regular discussions on incorporating concepts related to negative carbon solutions into the Company's decarbonization efforts, as well as understanding investor and stakeholder interests in net zero. These discussions ultimately resulted in the 2020 announcement that the Company updated its long-term GHG emissions reduction goal to net zero emissions by 2050. As part of its oversight of the Company's GHG reduction goals, the OES Committee played a leadership role in developing the updated target of net zero emissions by 2050. In addition, the OES Committee provided input and oversight in the development of the Company's Implementation and Action Toward Net Zero report, released in 2020. In addition, in 2020 and 2021 the OES Committee provided input to the Compensation and Talent Development Committee in developing a GHG reduction goal metric that is part of the long-term incentive compensation program for key senior executives and in adding a new net zero availability metric to the Company's annual incentive program that applies to almost 15% of our employees across the Southern Company system.

Board-level committee

The Audit Committee oversees the Company's financial reporting, audit process, internal controls and legal, regulatory and ethical compliance, which encompasses climate-related controls and compliance issues. In this role, the Audit Committee reviews and guides risk management policies that include climate-related risks. In addition, the Audit Committee's charter provides that it will review and discuss with management the development of internal controls for nonfinancial environmental, social and governance-related data and disclosures. For example, in 2021, the Audit Committee approved the engagement of its independent auditor to perform a review of the Company's Scope 1 and Scope 2 GHG emissions for the years 2020 and 2021.



Board-level committee

The Finance Committee reviews the financial strategy of and the strategic deployment of capital by the Company, which includes the Company's carbon emissions reduction strategy and the associated use of capital to accomplish the 2030 and 2050 GHG emission reduction goals. The Finance Committee's charter provides that it will review the financial strategy of and the strategic deployment of capital by the Company, including alignment of the Company's long-term capital allocation strategies with its net zero objectives. Each year the Finance Committee reviews the Company's financial plan including capital expenditure forecast for the coming year as well as our 5-year forecast (collectively the "Financial Plan"). Following review and discussion, including alignment with the Company's strategy and priorities, the Finance Committee recommends the Financial Plan for approval by the full Board. Southern Company's 5-year capital expenditure forecast of \$44+billion (2022-2026) includes substantial investment in grid reliability and resiliency as well as generation modernization. Importantly, further investment opportunities to move toward our net zero goal extend beyond our 5-year planning period.

Board-level committee

The Compensation and Talent Development (Compensation) Committee is responsible for reviewing and approving compensation plans and programs, including performance-based compensation awards that incorporate carbon reduction and other environmental-related metrics. In response to stockholder feedback, the Compensation Committee worked directly with the OES Committee to develop a GHG reduction goal metric as part of the CEO's long-term incentive compensation award beginning with the three-year performance period from 2019-2021 that ties 10% of the CEO's long-term equity incentive compensation to progress towards the achievement of the Company's 2030 and 2050 GHG emission reduction goals using quantitative and qualitative metrics. The long-term equity incentive compensation award was continued for the 2020-2022, 2021-2023 and 2022-2024 performance periods. Through the award, the Compensation Committee has set performance objectives and monitors implementation and achievement of those objectives to execute our business strategy related to reducing GHG emissions. The Compensation Committee regularly assesses goal rigor as Southern continues to decarbonize its system. In 2021, the Compensation Committee set an ambitious stretch goal for the quantitative metric for the 2021-2023 performance period, meaning that it is more challenging to achieve maximum payout for the award. In 2022, the Compensation Committee made several strategic enhancements to the GHG reduction goal that is part of the long-term incentive compensation program for the 2022-2024 performance period, including (1) extending participation to the Company's Chief Financial Officer (CFO) and Executive Vice President of Operations (EVP of Operations), (2) refining quantitative targets to better reflect renewable resource capacity factors and battery storage, and (3) broadening the qualitative assessment range so that it not only has the potential to provide upside but to also penalize poor performance. Further, in 2022, the Compensation Committee added a new net zero availability metric to the Company's annual incentive program that measures the availability of net zero generation resources, including nuclear, solar, wind and hydro, that applies to almost 15% of our employees across the Southern Company system.



Board-level	The Nominating, Governance, and Corporate Responsibility (NGCR) Committee
committee	oversees and reports to the full Board on the composition and competencies of the Board and its corporate governance policies. The NGCR Committee evaluates the range of qualifications, attributes, skills and experience that directors bring to the Board with the aim of facilitating a climate-competent Board. The Board includes independent directors with skills, qualifications, attributes and experience in climate change, energy science, low- and no-carbon technologies, negative carbon technologies and energy policy, as well as experience in overseeing the transition to a lower-carbon fleet. For example, throughout 2020 and 2021, as part of its evergreen refreshment efforts, the NGCR Committee led a search for a director with experience in nuclear regulation, nuclear generation and environmental areas to help oversee the Company's net zero by 2050 goal. The NGCR Committee recommended and the Board elected a new independent director with these skills, experiences and qualifications in October 2021. In addition, the NGCR Committee reviews the Company's strategies, programs and practices with respect to corporate responsibility matters that are significant to the Company and its stakeholders, including environmental sustainability and climate change. The NGCR Committee receives quarterly updates on Southern Company's ongoing stockholder engagement program and feedback received from stockholders on Environmental, Social, and Governance (ESG) topics, including climate-related risks and disclosures.
Board-level committee	The Business Security and Resiliency (BSR) Committee oversees cybersecurity, physical security and operational resiliency, including issues and policies relating to climate change and adaptation and its potential impact on business resilience. In this role the BSR Committee oversees efforts to secure the grid and maintain safe and reliable delivery of energy to customers in multiple risk scenarios, including climate-related risks. For example, in 2020 and 2021 the BSR Committee reviewed and evaluated physical risks posed to the Southern Company system's facilities and operations by severe weather events and the system's ability to withstand, mitigate and recover from the effects of any such events.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate- related issues are a scheduled agenda item Governance mechanisms into which climate-related issues are integrated		Please explain	
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action	Climate-related issues are integrated into all of the governance mechanisms listed. The OES Committee oversees, reviews and guides strategy on climate-related issues and significant environmental and safety policy and planning issues relevant to Southern Company, including but not limited to business	



Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitorina implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues

strategies designed to address the long-term reduction of GHG emissions, fleet transition and related risks and opportunities across the system, including netzero carbon strategies, resource planning, emerging technologies and research and development efforts, as well as the impact on employees and communities of implementing the business strategies and operations. The OES Committee was responsible for overseeing the setting of performance objectives with respect to the initial 2030 and 2050 GHG emission reduction goals set in 2018 and similarly played an instrumental role in updating the long-term goal to net zero by 2050. Starting in 2019 and continuing into 2020, the OES Committee began regular discussions on incorporating concepts related to negative carbon solutions into the Company's decarbonization efforts, as well as understanding investor and stakeholder interests in net zero. These discussions ultimately resulted in the May 2020 announcement that Southern has updated its long-term GHG emissions reduction goal to net zero emissions by 2050. In addition, the OES Committee provided input and oversight in the development of the Company's Implementation and Action Toward Net Zero report, released in September 2020. In order to monitor the implementation of performance objectives and progress against goals and targets for addressing climate-related issues, the OES Committee receives regular reports on and engages in robust discussion on a range of climaterelated topics at each board meeting. For example, regular quarterly reports are provided to and discussed with the OES Committee on the Company's progress in achieving its GHG emission reduction goals for 2030 and 2050. Regular quarterly reporting and robust discussions on progress with respect to the construction of Plant Vogtle Units 3 and 4 (new carbon-free nuclear generation) are also undertaken, as are regular robust discussions around integrated resource planning, scenario planning and analysis and the underlying assumptions for the scenario analysis. In addition, the OES Committee receives regular reports on operating units' safety and environmental activities and engages in robust discussions about carbon emissions and carbon risks and strategic planning. In addition, in 2020 and 2021 the OES Committee provided input to the Compensation



		Committee in developing a GHG reduction goal metric that is part of the long-term incentive compensation program for key senior executives and in adding a new net zero availability metric to the Company's annual incentive program that applies to almost 15% of our employees across the Southern Company system.
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies	The NGCR Committee oversees and reports to the full Board on the composition and competencies of the Board and its committees. Specifically, the NGCR Committee considers the qualifications, skills and attributes of the directors and the needs of the full Board to ensure that the skills represented on the Board allow the Board to review and guide strategy and risk management policies. Competencies considered by the NGCR Committee include expertise in climate-related matters and environmental policy and regulation, among others. Appropriate climate experience and credibility are specifically considered in this process. For example, throughout 2020 and 2021, as part of its evergreen refreshment efforts, the NGCR Committee led a search for a director with experience in nuclear regulation, nuclear generation and environmental areas to help oversee the Company's net zero by 2050 goal. The NGCR Committee recommended and the Board elected a new independent director with these skills, experiences and qualifications in October 2021. The NGCR Committee also oversees corporate governance policies, including but not limited to, reviewing and making recommendations to the Board regarding Southern Company's practices and positions to advance its corporate citizenship, including in the areas of environmental sustainability and climate change. The NGCR Committee receives quarterly updates about Southern Company's ongoing stockholder engagement program and feedback received from stockholders on ESG topics, including climate-related risks and disclosures.
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies	The Audit Committee oversees the Company's financial reporting, audit process, internal controls and legal, regulatory and ethical compliance, which encompasses climate-related controls and compliance issues. In this role, the Audit Committee reviews and guides risk management policies that include climate-related risks. In addition, the Audit Committee's charter



		provides that it will review and discuss with management the development of internal controls for nonfinancial environmental, social and governance-related data and disclosures. For example, in 2021, the Audit Committee approved the engagement of its independent auditor to perform a review of the Company's Scope 1 and Scope 2 GHG emissions for the years 2020 and 2021.
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Overseeing major capital expenditures, acquisitions and divestitures	The Finance Committee reviews the financial strategy of and the strategic deployment of capital by the Company, which includes the Company's carbon emissions reduction strategy and the associated use of capital to accomplish those goals. The Finance Committee's charter provides that it will review the financial strategy of and the strategic deployment of capital by the Company, including alignment of the Company's long-term capital allocation strategies with its net zero objectives. In this role, the Finance Committee reviews and guides annual budgets and business plans and oversees major capital expenditures with respect to climate-related issues. For example, in 2021, we had capital expenditures exceeding \$4 billion combined for transmission and distribution infrastructure enhancements and the construction of additional zero carbon resources at our electric operating companies. Looking forward, we expect capex for transmission, distribution and construction of zero carbon resources to be approximately \$3.5 billion annually for the duration of our 5-year plan.
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and	The Compensation Committee is responsible for reviewing and approving compensation plans and programs, including performance-based compensation awards that incorporate carbon reduction and other environmental-related metrics. The Compensation Committee worked directly with the OES Committee to establish a CEO incentive compensation award beginning with the three-year performance period from 2019-2021 that ties 10% of the CEO's long-term equity incentive compensation to progress towards the achievement of the Company's 2030 and 2050 GHG emission reduction goals using quantitative and qualitative metrics. The long-term equity incentive compensation award was continued for the 2020-2022, 2021-2023 and 2022-2024 performance



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	targets for addressing climate-related issues	periods. Through the award, the Compensation Committee has set performance objectives and monitors implementation and achievement of those objectives to execute our business strategy related to reducing GHG emissions. The Compensation Committee regularly assesses goal rigor as Southern continues to decarbonize its system. In 2021, the Compensation Committee set an ambitious stretch goal for the quantitative metric for the 2021-2023 performance period, meaning that it is more challenging to achieve maximum payout for the award. In 2022, the Compensation Committee made several strategic enhancements to the GHG reduction goal that is part of the long-term incentive compensation program for 2022-2024 performance period, including (1) extending participation to the Company's CFO and EVP of Operations, (2) refining quantitative targets to better reflect renewable resource capacity factors and battery storage, and (3) broadening the qualitative assessment range so that it not only has the potential to provide upside but to also penalize poor performance. Further, in 2022, the Compensation Committee added a new net zero availability metric to the Company's annual incentive program, the Performance Pay Program (PPP), that measures the availability of net zero generation resources, including nuclear, solar, wind and hydro, that applies to almost 15% of our employees across the Southern Company system.
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies	The BSR Committee oversees cybersecurity, physical security and operational resiliency, including issues and policies relating to climate change and adaptation and its potential impact on business resilience. In this role the BSR Committee oversees efforts to secure the grid and maintain safe and reliable delivery of energy to customers in multiple risk scenarios, including climate-related risks. For example, in 2020 and 2021 the BSR Committee reviewed and evaluated physical risks posed to the Southern Company system's facilities and operations by severe weather events and the system's ability to withstand, mitigate and recover from the effects of any such events.



C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Southern Company's Board of Directors evaluates climate-related issues as an integral part of the Board's oversight of business strategy, operations and enterprise risk. The Board as a whole aims to be climate competent and has structured its governance processes to address the array of climate-related risks and opportunities to our business. Each of our Board committees is responsible for various components of strategy, operations, risks and opportunities. In addition, the Board includes independent directors with skills, qualifications, attributes and experience in climate change, energy science, low- and no-carbon technologies, negative carbon technologies and energy policy, as well as experience in overseeing the transition to a lower-carbon fleet. For example, the Board has a director that previously served as the U.S. Secretary of Energy. In that role, the director has deep experience in clean energy technologies, renewable energy, energy policy, combating climate change and safe forms of nuclear power. This director also has experience in negative carbon technologies.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other C-Suite Officer, please specify Executive Vice President (EVP) of Operations	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly



Other, please specify	Both assessing and managing	More frequently than
Senior Vice President (SVP) Environmental & System Planning (E&SP)	climate-related risks and opportunities	quarterly
Other C-Suite Officer, please	Both assessing and managing	More frequently than
specify	climate-related risks and	quarterly
EVP, Chief Legal Officer (CLO) & Chief Compliance Officer (CCO)	opportunities	
Other C-Suite Officer, please	Both assessing and managing	More frequently than
specify	climate-related risks and	quarterly
EVP and President of External Affairs	opportunities	
Other C-Suite Officer, please	Both assessing and managing	More frequently than
specify	climate-related risks and	quarterly
Operating Company CEOs	opportunities	
Other C-Suite Officer, please	Both assessing and managing	More frequently than
specify	climate-related risks and	quarterly
EVP, Chief Commercial Officer (CCO) & Customer Solutions Officer (CSO)	opportunities	

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Southern Company's Board Chair/CEO has direct responsibility for climate-related issues including setting strategy and oversight of carbon emission reductions. Key elements of this responsibility include, for example, leading strategic resource planning and associated capital allocation, setting annual budgets, evaluating unregulated low-carbon and zero-carbon investments, leading climate-related risk assessments, assessing the impact of the Company's fleet transition on its employees and the communities it serves, make decisions regarding investments in R&D and innovation, and assessing climate-related controls and compliance.

The CEO leads a team of senior executive officers across the Southern Company system with responsibility for climate-related issues, including the CFO; EVP of Operations; EVP and Pres. of External Affairs; EVP, CLO & CCO; EVP, CCO & CSO; and the CEOs of key Operating Companies.

The senior executive officers meet monthly to discuss major business decisions with respect to operations, employees and customers, including regular discussions of climate-related issues, such as resource planning across the system and at each operating company. Federal and state environmental regulation and policy, and engagement with regulators, customers and stakeholders regarding GHG emission risks and opportunities are also regularly discussed.



In 2019 and 2020, the Chair/CEO, in conjunction with senior officers and in consultation with the Board, led a series of discussions on the Company's decarbonization efforts that evolved to incorporate concepts related to negative carbon solutions. They discussed the potential to revise the initial long-term goal set in 2018, reflecting emissions reduction progress to date, expected future resource decisions, and taking into account conversations with a wide variety of external stakeholders. As a result of these discussions, in May 2020, the Chair/CEO formally announced that the Company updated its long-term goal to net zero GHG emissions by 2050 and stated that the Company is expected to meet its 2030 reduction goal ahead of schedule, and possibly as early as 2025.

Additional roles and responsibilities in monitoring climate-related issues include the following.

The CFO, who also serves as the Company's Chief Risk Officer, has responsibility for capital allocation for major projects, enterprise-wide risk assessments and financial disclosures which include environmental risk and carbon-related risks. Officers and senior managers are responsible for working across the business to manage enterprise-level risk, monitor the performance of risk mitigation strategies and identify emerging risks. They meet routinely and engage regularly with the Board and its committees throughout the year.

The EVP of Operations and his direct report, the SVP of E&SP, have primary responsibility for system planning, which includes a regular full-scale assessment of the Company's generation fleet, including long-term planning for generation resources. The EVP of Operations and SVP of E&SP are responsible for monitoring and reporting on progress against the GHG emissions reduction goals. The SVP of E&SP is integral to stakeholder outreach and regularly participates in stakeholder engagement meetings to discuss the Company's decarbonization progress, integrated resource planning process, scenario planning and environmental policies, and programs. The Company's environmental affairs managers are responsible for environmental programs, including carbon policy activities, for the Southern Company system. The environmental affairs director reports to the SVP of E&SP.

The EVP, CLO & CCO's responsibilities include legal and ethical compliance programs, interaction with state and federal regulators, and engaging with stakeholders to discuss climate-related issues such as the GHG emission reduction goals and the risks and opportunities to the Company in the transition to a net zero future.

The EVP and Pres. of External Affairs' responsibilities include climate-related outreach at the state and federal levels across regulatory and legislative agencies and engaging with stakeholders on carbon and climate policy issues, including transparency on political contributions and lobbying efforts.

Operating Company CEOs (Alabama Power, Georgia Power, Mississippi Power, Southern Company Gas) are responsible for interfacing at the state level on resource planning proposals, and outreach to state and federal legislators and their regulators, and directly oversee safety, compliance and risk management programs at their individual utilities.



The EVP, CCO and CSO's responsibilities include leading Southern Power, a leading U.S. wholesale energy provider investing in clean energy solutions, and overseeing R&D and new ventures.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Details provided below.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The CEO's compensation includes a long-term incentive (LTI) award that ties a significant portion of compensation to achievement of 2030 and 2050 GHG reduction goals. 10% of the CEO's LTI award is aligned with the goals, equivalent to a potential payout of up to \$2 million based on achieving maximum performance. The Compensation and OES Committees designed the award with a measurable, quantitative component aligned with the 2030 goal and a qualitative component to incentivize achievement of the 2050 goal. The quantitative metric is defined in terms of cumulative megawatt (MW) change and is earned by putting new zero-carbon resources into operation and permanently placing coal or gas steam resources in retirement or inactive reserve status during the applicable 3-year period. For a target payout for 2020-2022, the system must achieve a 1,743 cumulative MW change. For a target payout for 2021-2023, the system must achieve a 2,291 cumulative MW change. The cumulative MW change consistent with these targets is projected to allow the Company to achieve its 2030 GHG reduction goal approximately five years early. The qualitative metric considers factors including leadership in energy policy, decarbonization R&D



			investments, other investments (e.g., Energy Impact Partners), and new business development (e.g., renewables, distributed generation, distributed infrastructure). Achievement is determined by the Board. For maximum qualitative performance, a 30% modifier is applied to the payout determined under the quantitative metric. Beginning with the 2022-2024 performance period, this GHG reduction metric is also part of the long-term equity incentive award for the CFO and the EVP of Operations.
Other, please specify Most employees, CEO & Senior Management	Monetary reward	Emissions reduction target Energy reduction target Efficiency project	We believe in pay for performance and design our compensation program to attract, engage, competitively compensate & retain employees. Nearly all employees participate in our annual incentive Performance Pay Program (PPP) that includes operational & financial goals that incentivize emission reductions. (1) Nuclear energy is net-zero carbon & a reliable & cost-effective fuel source. Its importance in our fleet continues to grow with the new nuclear units being constructed at Plant Vogtle. Annual assessments of nuclear construction progress are goals for & CEO, CFO, & other officers. Nuclear plant operations are also part of the goals for many senior managers & for thousands of employees at key subsidiaries. We measure safety, reliability & availability of the nuclear fleet because those metrics are crucial for delivering clean, zero-carbon energy at a reasonable price. (2) Customer satisfaction is a key performance metric. It reflects local customer feedback on utility service, including the balance between maintaining affordable prices & minimizing environmental impact. Local customer preferences also drive the regulatory process & implementation of renewable resources and energy efficiency programs that reduce environmental impact. (3) Generation availability and reliability is a key performance metric. It allows us to track efficient usage of our entire fleet, which includes a mix of



			lower emission fuel alternatives.
			(4) Energy efficiency, both within our fleet and system & as programs for customers, has the benefit of lowering costs for customers & reducing GHG emissions. These benefits attract economic development resulting in job growth for local economies. This development also helps grow EPS and benefits employee participants in the PPP.
			(5) Achieving annual financial goals, including EPS and business unit net income goals, is crucial to executing on our customer-centric business model & is a key performance metric. Maintaining this business model provides the opportunity to effectively respond to future carbon regulations & the potential to succeed in an accelerated transition to a low carbon business environment.
			In 2022, the Compensation Committee added a net zero availability metric to PPP. It measures availability of net zero generation resources, including nuclear, solar, wind & hydro & applies to 15% of employees across the system.
Other, please specify Almost all employees of Southern Company Gas	Monetary reward	Emissions reduction project Efficiency project	For employees of our Southern Company Gas subsidiary, including the CEO of Southern Company Gas, operational goals under the annual Performance Pay Program include leak response performance, system damage prevention and pipeline replacement projects that support the reduction of methane emissions.
Other, please specify Management group, including CEO	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Behavior change related indicator	Southern Company's management group, including our CEO, CFO, and other C-suite officers, has a portion of the annual Performance Pay Program incentive tied to the achievement of individual goals. Depending on the individual's position, individual goals may include environmental matters, energy efficiency, expansion of low- and no-carbon resources, and progress in research and development related to emission reduction efforts, among others. For the CEO, individual performance considered by the Compensation Committee of the Board in determining his 2021 annual incentive award (and disclosed in Southern Company's proxy statement) included: (1) advanced long-term



			strategy of transitioning fleet to net zero GHG emissions by 2050; (2) energy from coal in 2021 represented 21% of energy mix and energy from zero-carbon resources was 31%, compared to 69% and 15% in 2007, demonstrating the continued transition of our fleet; (3) added approximately 1,100 MWs of renewable generation; (4) announced intent to close nearly 6,370 MWs of coal generation (more than 55% of the Company's remaining coal capacity) by the end of 2028; (4) continued leadership in R&D, including engagement with key members of the Biden administration regarding decarbonization objectives and policy needs; and (5) led substantive engagement during the year with Climate Action 100+ investor group, our environmental stakeholder group, and other key investors and stakeholders.
Other, please specify Senior Management	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	Our strategy is to maximize long-term value to stockholders through a customer, community, and stakeholder focused business model that produces sustainable levels of return on energy infrastructure, and our long-term equity incentive program is intended to further this goal by directly tying a portion of compensation to the interests of stockholders. For senior management, including our CEO, CFO, and other C-suite officers, a substantial portion of their compensation is tied to the long-term equity incentive award, which includes measuring total shareholder return over a three-year period. Crucial to creating long-term stockholder value is the effective management of the risks and opportunities presented by carbon emission reductions and successfully sustaining and evolving our business as we transition to a net zero future. Our strategy for reducing GHG emissions includes aggressively growing our investment in renewable energy generation, modernizing the grid to optimize technological advancements, increasing the use of natural gas, building new nuclear units, continuing our industry-leading R&D efforts and investing in energy efficiency for savings on both sides of the meter. While these monetary awards are not specifically tied to emission reductions, effective



			implementation of these strategies results in direct Scope 1 emission reductions.
Other, please specify Almost all employees	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Behavior change related indicator	Southern Excellence Awards are given to employees for immediate recognition of superior performance. Employees who work to further climate-related initiatives, including emission reductions, R&D that furthers carbon-free and carbon-neutral energy resources, energy efficiency programs, the electrification of transportation and the promotion of our environmental stewardship and sustainable business practices, are eligible to receive these awards.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	None
Medium-term	2	10	None
Long-term	10	30	None

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Risks are identified based on potential substantive financial or strategic impact to the business with levels of impact ranging from 10s of millions of dollars to billions of dollars on the high end of the scale.

Enterprise Risk Management (ERM) generally refers to a comprehensive approach to risk management and oversight throughout an organization that is integrated with strategic planning activities (prioritize risks and allocate resources appropriately to better manage the business and mitigate risk). These risks include climate-related risks to the enterprise. While Southern



Company has a group of employees designated to facilitate and implement its ERM program, risk management is everyone's responsibility from the Board of Directors to each employee. The goal of ERM at Southern Company is to provide a clear understanding of the risks facing the Company and to ensure that oversight and accountability are appropriately defined. Risk governance and oversight is largely embedded in existing organization and control structures such as normal management oversight, project review processes, internal auditing, legal and regulatory compliance programs, and Sarbanes Oxley compliance programs. ERM governance provides structure to bring together these efforts to facilitate communications across entities and functions, promote consistency and the use of best practices, create a unified view of risk, and help incorporate risk into strategy considerations. The ERM program includes a risk profile process which is used to identify, assess, and plan for the mitigation of risks, including climaterelated risks, throughout the Southern Company system and culminates in formal risk profiles for each participating entity. Southern Company's risk profile process is a bottom-up approach to risk identification and performed from a business unit and functional area perspective for robustness. This approach utilizes the expertise of our employees in identifying the major risks and promotes a risk-aware culture across the Company. For environmental risks, the process leverages environmental governance teams, made up of subject matter experts across the system, who identify and evaluate risks to the Company. The results are provided to the Environmental Management Council for consideration before presentation to the Board through the ERM process. The risk profile process currently includes approximately 18 participating entities (operating companies, business units and functional areas) and 17 risks of materiality, which include climate-related risks to operational performance, which includes grid, generation and pipeline network resiliency, and fleet transition strategies.

Additionally, information gathered through non-ERM processes, such as disclosures, auditing, and system and financial planning, are used for insight and monitoring of the ERM program. All risks are categorized and evaluated, and ultimately the top risks are consolidated into a Southern Company profile which requires the focused attention of the Board and the SCMC. Profiles are used as inputs to various business processes at the entity, corporate, and Board of Director levels. A carbon-related risk has been incorporated in Southern Company's ERM program's risk profile process since the early 2000s and started with an initial focus on the risk of laws and regulations.

The Board of Directors is responsible for oversight of strategy and risk, including risks related to climate-related matters. The Board recognizes the potential impacts on our business and the transitional risks and opportunities the utility industry faces in a net zero GHG future. The Board regularly assesses the Company's short- and long-term business strategy, including the long-term sustainability of its business, in light of these climate-related risks and opportunities. Issues that are the subject of active discussions at the Board and Board committee meetings include climate-related risks and opportunities, regulatory compliance, energy efficiency, renewable energy generation and emerging technology.

All Board members are actively involved in our risk oversight function. The Board reviews our risk profile and ensures that oversight of each risk is properly designated to an appropriate Board committee or the full Board. Each Board committee provides ongoing oversight for the risk designated to it, reports to the Board on their oversight activities, and elevates review of



risk issues to the Board as appropriate. Independent directors chair each Board committee, and each committee has a designated member of executive management as the primary responsible officer for providing information and updates to the Board committee related to significant risks. There is regular, open communication between management and the Board on these topics throughout the year.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climaterelated risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term Medium-term Long-term

Description of process

Southern Company incorporates climate-related risk management into the multidisciplinary company-wide Enterprise Risk Management (ERM) approach, which seeks to provide a clear understanding of the risks facing the Company and to ensure oversight and accountability are appropriately defined. Southern Company's goal is to optimize the relationship between risk and return by establishing a culture and risk oversight structure to encourage sound risk taking balanced by effective risk management practices.

Risks and mitigation efforts are managed on an ongoing basis throughout the year at all levels of operation. In the spring of each year, an Annual Risk Profile Process is conducted by the business units to reevaluate and update their individual risk profiles. The summary below outlines the integration of those processes.

Part 1: Identification

The Annual Risk Profile Process facilitates communication and planning for key risks at each organization along a timeline to complement the financial planning process. The time horizons considered are short-term, medium-term, and long-term time horizons. During the risk profile process, experts from across multiple business units and



corporate functions collaborate to identify and clearly define business risks. Risks include climate-related risks to direct operations, and upstream and downstream in the value chain.

Part 2: Assessment

Risks identified during the Annual Risk Profile Process are rated on materiality, likelihood, controllability, and velocity, and included in a risk register. While most risks in the risk register are concentrated along the financial planning horizon, or within 5 years, medium- and long-term risks also are considered. The time horizon is considered separately from the velocity dimension, which considers the time the risk takes to materialize following exposure. We assess all stages of the value chain, recognizing we have a higher degree of control over our direct operations. Although the degree of control may be lower upstream and downstream, we take action to mitigate risk where possible. For example, we may diversify our suppliers, incorporate contractual language for protection against risks, and/or conduct scenario analyses to create awareness of potential risk impacts.

Part 3: Strategic Planning

Once the risks have been assessed, existing mitigation plans are reevaluated, and strategies are identified for new risks. Effective mitigation strategies are specific and actionable with a timeline. During this process, emerging risks not identified as the key risks are evaluated to understand the impact on the Company and potential mitigation responses.

Part 4: Risk Response

The risk registers from across the system are consolidated into a draft risk profile for Southern Company by a core ERM team. The draft risk profile is created through an alignment process that captures and categorizes each risk identified from the entities. The discussions identifying the key issues and risks, their drivers, and the mitigation plans are critical to the creation of a comprehensive, company-wide risk profile that drives management planning.

Once categorized and evaluated, the Southern Company Risk Profile will reflect only the top risks that require the focused attention of the Board and the executive level management (Management Council). The draft risk profile is reviewed by senior and executive management for input, discussion and approval. Each risk on the Southern Company Risk Profile is assigned a Management Council member who is ultimately responsible for the management of that risk as well as preparing the appropriate communication on these activities to the Board. The risk profile will then be presented to the Southern Company Board of Directors, and the overall process is reviewed with the Audit Committee. For each board meeting, the agenda and discussion of the Board are mapped to the SO Risk Profile to clearly demonstrate that appropriate attention is placed on these key risks.

Throughout the year, officers and senior managers are responsible for working across the business to manage enterprise-level risk, monitor the performance of risk mitigation



strategies and identify emerging risks. They meet routinely and engage regularly with the Board and its committees in consideration of short, medium, and long-term risks. The Operations, Environmental and Safety (OES) Committee of the Board is charged with review and oversight of the significant operating segments and significant environmental and safety policies, including addressing long-term reduction of GHG emissions. As part of the governance structure, the Chief Financial Officer is also the Chief Risk Officer, and is accountable to the CEO and the Board for ensuring that enterprise risk oversight and management processes are established and operating effectively.

Physical Case Study

Situation: Much of our electric generation, transmission and distribution footprint is located within an area of the U.S. at higher risk for impacts from severe storms, including tornados and hurricanes.

Task: Based on historical experiences with all extreme weather events, structures throughout the system have been evaluated.

Action: As a result of this evaluation, structures have been hardened to better protect against damages from high winds, flooding and extreme low temperatures (e.g., use of concrete poles, weatherization of generating equipment and strengthening of cooling towers for generation units near the coasts).

Result: Evaluating and hardening our structures increases reliability and resilience in the face of extreme weather events.

Transition Case Study

Situation: As we transition to a clean energy future, natural gas is required to maintain reliability for our electricity customers as we deploy increasing amounts of renewable energy across our system and decarbonization solutions are required for our natural gas distribution business.

Task: Southern Company is seeking opportunities to advance low-carbon technologies, including related to natural gas. For our natural gas distribution business, we are pursuing opportunities to use or repurpose the natural gas delivery infrastructure to carry renewable natural gas (RNG), hydrogen or another energy carrier, thus continuing to decrease the carbon intensity of the fuel.

Action: Southern Company Gas, along with Southern Company, has also taken on a leadership role in a new R&D initiative, HyBlend, studying the blending of hydrogen in natural gas infrastructure.

Result: To date, the HyBlend project has studied the effects of hydrogen on plastic and steel materials commonly used in the natural gas delivery network, and the results will be presented at the 2022 ASME Pressure Vessels & Piping Conference.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?



	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	All relevant environmental laws and regulations are incorporated into our climate-related risk assessments, and associated business risk is evaluated in the annual risk profile process. One risk to our business is potential increased costs associated with compliance with new unit-specific regulatory standards for GHG emissions. The U.S. Environmental Protection Agency (EPA) has indicated that it plans to issue a new proposed Section 111(d) rule to regulate GHG emissions from existing power plants in the Spring 2023. Southern Company is closely monitoring the anticipated CAA 111 rulemaking to inform ongoing internal planning and risk assessment. The ultimate impacts of any environmental regulation to the Southern Company system will depend on federal agency actions, state implementation plan requirements, if applicable, general market conditions, and the outcome of any associated legal challenges. These factors are regularly reassessed as new information arises.
Emerging regulation	Relevant, always included	Southern Company considers emerging regulation in risk assessment by analyzing the potential impacts of proposed regulations or legislation in the annual risk profile process. Climate related initiatives remain a focus area of Congress and Federal Agencies, and Southern Company relies upon internal and external subject matter experts to understand the risks legislative or regulatory changes may pose to company operations. Emerging regulation from new legislation or Administration policy designed to further limit emissions from fossil fuels is a risk for Southern Company. There has been significant activity in Congress on climate-related legislation over the last several years that include a range of policies to achieve reduction in GHG emissions. One approach is an economy-wide carbon tax or fee, which has been proposed in a few recent bills. These proposals typically impose an initial economy-wide price on carbon (e.g., dollars per ton CO2) with varying degrees of escalation each year. Carbon tax bills proposed in the 117th Congress (2021-2022) have included fees starting at various prices, some of which exceeded \$50 per ton of CO2. Another approach proposed in recent climate bills is a clean electricity standard, which typically requires utilities to supply an annually increasing percentage of low- and/or zero-emission electricity to end users. In addition to legislative proposals, regulatory agencies have recently proposed rules that could impact utilities. In November 2021, EPA published a proposed rule to expanding emission standards for methane and VOC emissions from new and existing sources in the production, processing, and transmission and storage segments of the oil and gas sector. In February 2022, FERC introduced two draft policy statements that specify the Commission will prepare an environmental impact



	T	
		statement ("EIS") for every project estimated to emit more than 100,000 metric tons CO2e per year.
		These proposed regulatory and legislative policies have the potential to increase costs and/or regulatory constraints on the energy sector. Southern Company engages with stakeholders and policymakers to promote constructive policy that balances the principles of clean, safe, reliable and affordable energy. In our planning process, we consider a range of scenarios related to climate policy to support current and future major investment decisions and account for the risks regulatory changes may pose.
Technology	Relevant, always included	R&D, cybersecurity and generation technology risks are incorporated into our climate-related risk assessments and business risk evaluated in the annual risk profile process. The risk to our business from the incorporation of technology by customers is reduced demand for our primary products, electricity and natural gas. The adoption of technology by customers can have both positive and negative impacts on sales. Many new technologies utilize less energy than in the past. However, electric and natural gas technologies such as electric and natural gas vehicles can create additional demand. Southern Company uses best available methods and experience to incorporate the effects of changes in customer behavior, state and federal programs, Public Service Commission (PSC) or other applicable state regulatory agency mandates and technology, but Southern Company's planning processes may not accurately estimate and incorporate these effects. Southern Company recognizes and evaluates the risks associated with technology advancements and utilizes these risks as an opportunity to create innovative partnerships. In June 2021, Southern Company brought online a microgrid project on the campus of Georgia Tech that allows Southern Company subsidiary Georgia Power to gain insight on how smart energy management systems can interact with the grid to achieve resilience and optimal utilization of energy. In November 2021, Southern Company signed an agreement with DOE to lead a team that will design, construct and operate the Molten Chloride Reactor Experiment – the world's first critical fast-spectrum salt reactor. The project will advance TerraPower's Molten Chloride Fast Reactor (MCFR) technology and is expected to significantly reduce the technical, licensing and execution risks associated with development of an MCFR demonstration reactor that is expected to be operational by the early 2030s.
Legal	Relevant,	Litigation risks associated with compliance to current and emerging
	always included	environmental regulations and legislation are incorporated into our climate-related risk assessments and business risk evaluated in the annual risk profile process. The risk of litigation exists for the Company if it does not comply with climate-related regulation or legislation. One



		key element in assessing and managing this risk is the Southern Company Audit Committee of its Board. This Committee reviews and guides risk management policies that include environmental compliance and other climate-related risks. In addition, the Company maintains an Environmental Management Council consisting of executives and directors from throughout the enterprise who review risks, communicate compliance options and develop policy. As an example of the Company's ongoing assessment and management of risk, in 2020, Southern Company reviewed and revised its Environmental Management System to identify and address possible management gaps. Such management gaps could lead to a compliance or litigation risk if left unaddressed.
Market	Relevant, always included	Financial reporting and controls, financial integrity, long-term growth, demand of securities, and industry transformation are incorporated into our climate-related risk assessments and business risk evaluated in the annual risk profile process. Market related risk to our Company includes lower customer demand for our primary products, electricity and natural gas service. Changes in customer behaviors in response to energy efficiency programs, changing conditions and preferences, or changes in the adoption of technologies could affect the relationship of economic activity to the consumption of energy. Industry transformation is a climate-related risk with impacts across Southern Company's enterprise.
		PowerSecure, Inc. (PowerSecure) helps customers lower their costs and improve their energy efficiency by delivering clean, safe, reliable and affordable energy solutions to customers' facilities. As a proven provider of multi-measure energy efficiency projects, our team of experts has developed, installed, managed, and serviced 2+ GW of microgrid capacity over the past 20 plus years, as well as implemented over \$800 million of energy efficiency upgrades. We take a full-facility, lifecycle approach through production and management, delivering clean and resilient energy to our customers at the best possible value.
		In September 2021, PowerSecure partnered with the PGA TOUR to install sustainable, resilient and reliable microgrid solutions in its new Global Home Headquarters. This system is equipped with a solar complex to reduce energy needs of the headquarters complex and also with backup generation to supply continuous power in the event of a storm or other power loss.
Reputation	Relevant, always included	Corporate image, ethics and compliance incidents, safety, and workforce talent and culture are incorporated into our climate-related risk assessments and business risk evaluated in the annual risk profile process. Southern Company recognizes there is reputational risk if a third party incorrectly infers there is inaction or inadequate action on



climate issues by the Company. In 2018, we published the Planning for a Low Carbon Future report to outline how we are taking steps to increase disclosure of our preparations for a low-carbon future. In 2020, we published an addendum to the 2018 report titled: Implementation and Action Toward Net Zero. In the recent iteration we provide further insights into how we are tackling these tough issues including setting a net zero carbon goal for our 2050 operations. In September 2021, we published the 2019/2020 Corporate Responsibility Executive Summary, which highlighted our diversified energy portfolio as a key component to our ongoing energy transition. The 2022 Just Transition Report, released in March of 2022, outlines Southern Company's Just Transition Principles. In our state-regulated utility service territories, we have increased transparency in our regulatory filings over the past 4 or 5 years. Additionally, we work within the regulatory processes in our states to ensure decisions are in the best interest of customers and we are subject to PSC oversight of certain major decisions. Acute Relevant, Infrastructure for generation, transmission and distribution of electricity physical always is exposed to physical risks. Preparation includes redundant and included flexible operations functions and facilities, as well as coordinating drills for responding to risks such as storms. The Business Security and Resiliency (BSR) Committee of the Board reviews and evaluates physical risks. Acute physical risk could include damage to our generation transmission and distribution systems following a weatherrelated impact. Southern Company R&D is working on technology options to maintain operational flexibility based on the identified needs of various system conditions. Our long-standing research of unmanned air systems is paving the way for purely automated grid inspections and greatly improving our storm restoration efforts. R&D has demonstrated wide-scale deployment of Edge of Network Grid Optimization (ENGO) devices to flexibly control the voltage profile on the distribution grid, enabling voltage reduction programs and distributed energy resource integration. This option reduces distribution peak demand by smoothing the voltage across the grid. The Company is committed to continued investment in grid modernization including smart grid technologies for enhanced resilience and the advancement of customers and communities like those implemented at PowerSecure's own campus Microgrid 360. Microgrid 360 is a state-of-the-art advanced microgrid that showcases ultra-clean and modular Tier 4 Final (ultra low emissions) engines, a solar array, fuel cells and a battery energy storage system. A modern grid and energy storage options allow for minimum disruptions in operations due to acute physical risks.



		Our gas business actively responds to acute physical demands on its distribution system. In 2019, the Northern Illinois Gas Company (Nicor Gas) territory in Illinois experienced record cold for several consecutive days. January 30, 2019 had an average temperature for the day of around 16 degrees below zero, about 40 degrees colder than normal. With a focus on proactive service appointment scheduling, added staffing for the event and constant monitoring of supply lines and reservoirs, Nicor Gas provided safe and reliable natural gas service to its 2.2 million customers with no major service outages during the event.
Chronic physical	Relevant, always included	Hardening and resiliency efforts are a focus for generation facilities, the transmission system and the distribution system. Preparation may include physical strengthening of structures, enclosing equipment, undergrounding of lines and additional tie lines. Business risks are evaluated in the risk profile process. The BSR Committee of the Board reviews and evaluates physical risks. Chronic physical risk to our facilities and infrastructure includes risks from flooding and hurricane-related damages.
		As a result of major hurricanes, like Hurricane Katrina in 2005, we have evaluated our facilities for flooding potential and instituted changes that have improved our resilience to recent hurricanes, including moving the Mississippi Power Operations Control Center further inland in 2008. This new operations center is located outside of a flood zone and miles away from the coastline. The facility is constructed to withstand 200 mile per hour winds and operate independently of public utilities for a few days. This results in an operations center that can be staffed 24/7 through the worst impacts of a hurricane.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 4

Where in the value chain does the risk driver occur?



Direct operations

Risk type & Primary climate-related risk driver

Acute physical Cold wave/frost

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Southern Company is committed to maintaining robust and resilient energy infrastructure that is capable of reliably delivering energy during unexpected, high-impact events such as natural and man-initiated disruptions.

Much of our electric generation, transmission and distribution is located within the Southeast U.S., a region characterized by warm, humid summers and mild winters. The Southeast experiences a wide range of extreme weather and climate events, such as extreme precipitation, drought, heat waves, cold outbreaks, winter storms, severe thunderstorms, tornadoes and landfalling tropical cyclones.

Over the years, customer home heating preference in the Southeast has shifted toward electricity and has resulted in peak electricity demand in the winter in some years exceeding summer peak demand. This increase in winter demand can be exacerbated by extreme cold weather events, like the 2014 polar vortex event where eight reliability coordinating areas set all-time peak loads. In addition, these cold weather events can be a challenge for generating resources, as was experienced in the February 2021 cold weather event that impacted the ERCOT region, which experienced over 27 GW of weather-related generator outages and derates at the time of maximum unavailability.

According to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), global warming is expected to decrease the frequency and intensity of cold extremes in the future. However, some studies suggest that arctic warming may be causing a weakening of the jet stream, which can result in more severe winter weather events over the U.S. While there is

ongoing research to better understand this complex issue, it is important to consider extreme winter weather risks in resource planning.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range



Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

10.000.000

Potential financial impact figure - maximum (currency)

430.000.000

Explanation of financial impact figure

The financial impact figures shown above represent the cost customers could incur due to the inability of the Southern Company System to serve energy to electricity customers during an extreme cold event.

Southern Company's generation resource planning process for its retail operating companies includes a resource adequacy analysis. For winter resource planning, Southern Company plans for a 1-in-10+ year event that results in disruption in service to customers. This resource adequacy analysis uses 58 years of historical weather data for the Southern Company service territory.

To estimate the economic costs that customers incur due to a power outage, Southern Company uses a metric called "value of lost load" (VoLL). In 2012, Southern Company conducted a customer survey to determine the VoLL for its service territory, which was adjusted in 2020 to capture changes in valuations due to evolution of customers' usage patterns brought about by technological advances, changes in economy, and other demographic factors.

As part of its resource adequacy analysis, Southern Company conducted a Reserve Margin Study in 2021, which supported the 2022 Georgia Power Integrated Resource Plan. This study determined that the weighted average value of Expected Unserved Energy (EUE) for a 1-in-10+ winter event for the Southern Company system is about 300 MWh. However, there are instances in our study with much higher EUE. For example, if the Southern Company service territory were to experience the temperatures from the coldest day of 1985 again, we could encounter EUE of around 13,000 MWh. Multiplying these EUE values with the 2021 winter VoLL for the Southern Company system (~\$33,000/MWh) results in a potential financial impact of roughly \$10M to \$430M in cost to customers.

It is important to note that this calculation does not capture the risk to the Company associated with the damage to our reputation with customers and regulatory authorities from disrupting service to customers.

Cost of response to risk

20,000,000

Description of response and explanation of cost calculation

In January 2014, the Southern Company service territory experienced sustained extreme cold temperatures during a polar vortex event. The cold weather resulted in unit



outages and derates that reduced the overall reserve capacity for the Southern Company system; however, the system maintained its ability to serve load to customers. Subsequently, NERC published a report titled, "Polar Vortex Review," which made recommendations based on lessons learned from the event. The report noted that SERC's main driver of outages and derates related to the event was cold weather, with the majority of outages and derates related to equipment issues.

The electric operating companies were tasked with addressing the report's recommendations at its generating facilities.

The actions listed below were taken by Southern Company retail electric operating companies in response to the NERC report's recommendations for winter preparedness.

- Enhanced a freeze protection program for non-nuclear generating plants, including: 1) identification of a freeze protection owner at each site; 2) freeze protection training; 3) freeze protection assessment; 4) freeze protection maintenance strategy; 5) operational procedures; and 6) process for communicating relevant matters and issues.
- Fleet Operations conducts regular meetings with the plants to prepare and confirm winter readiness. As potential cold weather events approach, there are additional meetings and conference calls to ensure awareness of potential weather conditions.
- Incorporated extreme weather scenarios into the Winter Operational Readiness assessments.
- Significantly reduced planned maintenance in January and February.

As a result of these actions, the retail electric operating company generating fleets have increased readiness for extreme cold winter weather events.

We estimate \$20,000,000 for the "cost of response to risk," which represents capital costs and operations and maintenance expenses incurred by Georgia Power from 2014 through 2021 to implement the freeze protection program, as detailed in a data request response in Georgia Power's 2022 Integrated Resource Plan. While this program has been implemented across all of Southern Company's generation fleet, this example does not include capital costs and operations and maintenance expenses associated with the program for other Southern Company subsidiaries.

Comment

Based on historical experiences with all extreme weather events, structures throughout the Southern Company system have been evaluated and hardened as needed to better protect against high winds, flooding and extreme low temperatures (e.g., use of concrete poles, weatherization of generating equipment, and strengthening of cooling towers near coasts).

Southern Company's vertically-integrated structure, state-regulated planning processes, diverse generation fleet, and robust transmission grid and pipeline network have all contributed to our ability to timely respond to catastrophic weather events and maintain resilient electric and natural gas distribution systems. When high-impact events occur in our footprint, Southern Company can quickly and efficiently restore service to



customers.

Part of the restoration process is ensuring critical facilities are brought back up quickly. Hurricane Zeta occurred just days ahead of the November 2020 general election and resulted in \$635 million in damage in Mississippi and \$840 million in damage in Alabama. The storm left many in both states without power, with companies executing a significant response to restore service to affected customers and polling locations for voters to safely cast their ballots. In December 2020, Alabama Power and other state power providers were invited to accept a National Association of Secretaries of State (NASS) Medallion Award "to recognize outstanding service and dedication to furthering the mission of NASS." Mississippi Power was similarly recognized.

In 2021, another year of extreme weather, PowerSecure solutions delivered outstanding resiliency performance and tangible customer benefits: 1,239 PowerSecure sites in 33 states provided resiliency during utility outages from storms and fires, with an impressive 99.1% successful run rate. Not only did these systems achieve valuable outage cost savings, but also avoided business disruption when customers and communities needed resources the most.

Our retail electric utility subsidiaries' restoration abilities have been nationally recognized dozens of times through EEI's Emergency Recovery Award. In 2021, Georgia Power was awarded for help provided to First Energy following Hurricane Isaias. Alabama Power received EEI's Emergency Response Award for helping to restore service in Texas following Hurricane Nicholas.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Emerging regulation from new legislation or Administration policy designed to constrain emissions from the use of fossil fuels is a risk for Southern Company. While the U.S. EPA continues to work on regulatory programs to reduce GHG emissions, such as emission standards under Section 111 of the Clean Air Act, there has been significant activity in Congress on climate-related legislation over the last several years. Topic areas have included: international GHG commitments, carbon tax, clean/renewable energy standards, mitigation/adaptation and resiliency support, low carbon technology



development support, and tax incentives for deployment of low carbon resources.

Costs associated with such GHG policies could be significant to the utility industry and the Southern Company system. However, the ultimate impact of these potential policies will depend on various factors, such as the policy approach, framework and stringency, any state-level adoption and implementation requirements, the availability and cost of any deployed compliance strategies and associated technologies, and the outcome of any associated legal proceedings. For example, a hypothetical GHG policy resulting in a fee per metric ton of CO2 would substantially affect the ways we economically dispatch our generation fleet and would increase the cost of supplying electricity to our customers.

Southern Company uses pressure on CO2 in electric generation resource planning scenario analyses. The analyses consider both the evolution of the U.S. energy economy and the least-cost evolution of the Southern Company generating portfolio. In different scenarios, different paths for future CO2 pressure are assumed. The views on CO2 are designed to represent a range of future CO2 policy pressures, such as a carbon tax, clean energy standard, cap-and-trade program and/or Clean Air Act regulation.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4,100,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact figure

In 2021, the Southern Company system's Scope 1 GHG emissions were around 82 million metric tons of CO2 equivalent (CO2e), representing the Company's direct and current exposure to future GHG policies in the absence of any mitigation efforts. This exposure, however, is dynamic due to numerous factors, including the ability of Southern Company's existing electric generating fleet to dynamically dispatch due to changing generation unit-level economics along with the ongoing evolution of the generation fleet to include new nuclear and more renewable generation resources.



Based on the Southern Company system's 2021 Scope 1 GHG emissions, a hypothetical GHG policy resulting in a \$50 per metric ton of CO2e price would have exposed the Southern Company system's customers to approximately \$4.1 billion in higher operating costs in a single year; however, this cost does not account for any mitigation measures that could have materialized, such as dispatching the electric generating fleet to reduce GHG emissions or other opportunities that might offset the higher operating costs.

[82 million metric tons CO2e * \$50/metric ton CO2e = \$4.1 billion per year.]

Cost of response to risk

1,000,000,000

Description of response and explanation of cost calculation

Emerging federal regulation and legislation to limit emissions from the use of fossil fuels is a risk for Southern Company. While the U.S. EPA continues to work on regulations to reduce GHG emissions, there has also been significant activity in Congress on climate-related legislation (e.g., international GHG commitments, carbon tax, clean energy standards, and tax incentives for low carbon resources).

Southern Company's state-regulated electric operating companies use a robust planning process to quantitatively evaluate resource needs over a 30+ year horizon. This process uses detailed resource expansion modeling, incorporating macro scale model data from EIA, as well as recent commodity and economic indicators and policy trends, including pressure on CO2 emissions. Inputs and assumptions are evaluated on an annual basis and are adjusted, as needed.

Southern Company annually develops scenarios that consider views of the future that vary the degree of pressure on CO2 emissions, price of fuels, cost and performance of generating technologies and load growth. Scenarios have included potential CO2 price pressure ranging from \$0 to \$50 per metric ton of CO2 emitted, such as may be imposed through a carbon tax or through U.S. EPA regulation.

Using the \$0 CO2 price scenario as a baseline, the modeled \$50 scenario resulted in an estimated increase in capital and O&M expenditures over the modeling horizon for the retail electric system with a net present value of approximately \$38 billion, which is an average of approximately \$1 billion per year over the 30+ years modeled. The modeling results in changes to dispatch of the existing fleet and investments in lower emitting resources to mitigate the cost pressures of the CO2 policies considered.

Based on review of emerging policy, we added a view of CO2 pressure in 2021 that set an annually decreasing limit on CO2 emissions reaching net zero in 2050. This view reflects a form of CO2 pressure such as a clean electricity standard that is different from a carbon tax.

Southern Company's financial exposure to future GHG policies depends on numerous unknowns, e.g., a policy's framework and stringency, any state-level requirements, the



availability and cost of compliance strategies and control technologies. Future GHG reduction policies may present opportunities for Southern Company by incentivizing energy efficiency through electrification and natural gas utilization to reduce emissions across the entire economy.

Comment

Southern Company aims to minimize its exposure across the energy value chain as it makes, moves and sells energy to a wide customer base. Southern Company's business model relies heavily on state-regulated electric and natural gas investments as well as long-term, contracted energy infrastructure. Southern Company's wholesale portfolio includes natural gas, coal, nuclear and renewable electric generating assets and energy storage, electric transmission and distribution, local natural gas distribution, midstream natural gas transmission and distributed energy infrastructure. In 2021, the electric generation mix was 21% coal, 48% natural gas, 16% nuclear and 15% renewables/other.

Southern believes that operating a customer-centric business model provides the opportunity to effectively respond to future GHG policies and the potential to succeed in a transition to a net zero business environment. Southern has anticipated and incorporated GHG pressure into its scenario planning and enterprise risk management practices for more than ten years. These practices have allowed Southern Company to evaluate and manage the risk around GHG emissions and make decisions that are in the best interest of customers. Southern Company has also applied substantial resources to the technology necessary to move toward a low-carbon future and is committed to providing clean, safe, reliable and affordable energy, with a goal of transitioning to net zero operations by 2050.

Future GHG policies, depending on the approach and structure, could present a range of risks and opportunities. Since the Southern Company system's current portfolio includes assets that rely upon the utilization of carbon-based fuels, future GHG policies could increase the Southern Company system's costs (e.g., operating costs) and, thus, increase customer prices associated with the ultimate delivery of energy. Opportunities include an increase in energy efficiency through electrification of higher carbon intensive sectors like transportation and investments in renewable natural gas and low carbon fuels utilization to displace higher carbon intensive fuels to reduce GHG emissions across the entire economy.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market

Changing customer behavior



Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

The energy sector is rapidly evolving, driven by customer preferences, technology advancements, energy security and resiliency efforts, and environmental, social, and governance initiatives. Codes and standards for buildings and end use equipment are evolving, and new homes are constructed to be more energy efficient, decreasing the demand for electricity and natural gas. Customers are actively seeking options to decrease their energy usage and have an increasingly wide range of options for energy efficiency products and services. For example, residential customers may choose to upgrade to more energy efficient home appliances, make home improvements to replace windows or add insulation, install smart thermostats, and replace incandescent with LED light bulbs.

In response to the increased demand for energy efficiency options, Southern Company subsidiaries offer energy efficiency programs and services to customers. For example, Alabama Power offers the My Power Usage tool to help residential customers adjust energy consumption according to their lifestyle and budget, as well as other checkups and calculators for energy and lighting. In the 2019 Integrated Resource Plan, Alabama Power Company received approval to implement 200 MW of demand-side management programs, which will include expanding the energy efficiency offerings to customers.

Additionally, Southern Company subsidiaries provide electric service to several cities which have expressed interest in energy efficiency and renewable energy goals. In 2018, the mayor of Birmingham, Alabama signed a 100% sustainable energy pledge. In 2019, the Atlanta City Council unanimously passed a resolution to achieve 100% clean energy by 2035. Also, in Georgia, the local governments of Athens-Clarke County, Augusta-Richmond County, Clarkston, DeKalb County, and Savannah have released 100% clean energy initiatives. In 2022, the Georgia Coalition of Local Governments, a coalition of local municipalities, formally intervened in the IRP process to advocate for clean energy decisions. These examples of community-wide renewable commitments and engagement in our service territory demonstrate the movement to a more energy efficient and renewable-centric customer base.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)



Potential financial impact figure – minimum (currency)

231.000.000

Potential financial impact figure - maximum (currency)

1.925.000.000

Explanation of financial impact figure

To calculate the potential revenue impacts of increased energy efficiency adoption by residential customers of Southern Company's retail electric subsidiaries, we multiplied the average residential retail price per kWh by an estimate of the annual energy savings potential in kWh. Since the average residential retail rate includes charges which will not be avoided through energy efficiency this is likely an overstatement of the revenue impact. We provide two estimates, one using the full technical potential and one using the achievable potential at a 50% incentive level. The estimates of potential savings come from the Achievable Energy Efficiency Potential Assessment prepared for Georgia Power as part of the Georgia Public Service Commission approved Demand-Side Management Program Planning Approach. The savings potential as a percentage of load calculated for Georgia Power was used as a proxy for Alabama Power and Mississippi Power when calculating system wide potential load reductions in kWh.

Technical Potential represents the theoretical upper limit of efficiency potential if customers adopt all feasible measures regardless of their cost or customer preference. Technical potential also assumes the adoption of every available measure, where applicable. For example, it includes installation of high-efficiency windows in all new construction opportunities and air conditioner maintenance in all existing buildings with central and room air conditioning. Realistically, these retrofit measures are phased in over many years to align with the stock turnover of related equipment units, rather than phased in all at once.

Economic Potential limits the adoption to only cost-effective energy efficiency measures. In the study used for this estimate, cost-effectiveness was measured by the Total Resource Cost ("TRC") test, which compares lifetime benefits to the incremental cost of the measure. If the benefits equal or outweigh the costs, a given measure is considered in the economic potential. Achievable Potential further refines economic potential by applying customer participation rates that account for market barriers, customer awareness and attitudes, program maturity, and recent program history. It represents energy savings that could be realistically achieved through program and policy interventions at a given incentive level. For the purposes of this estimate an incentive level of 50% of the incremental cost was assumed to be provided to end use consumers.

Cost of response to risk

4,000,000

Description of response and explanation of cost calculation



The cost provided for the response to risk represents the 2021 budget in the R&D areas related to end use technologies, at approximately \$2,200,000, and distributed generation and storage, at approximately \$1,800,000, for a total of \$4,000,000. This is not a comprehensive representation of the cost of our response to this risk. These expenditures are aimed at developing end use technologies and reliability-related products and services, with a key focus on solutions for commercial, industrial and residential customers.

Southern Company's New Ventures Group is the Founding Partner and Chair of the \$2+ billion utility-backed venture capital fund, Energy Impact Partners (EIP). EIP conducts extensive research to identify startups to invest in that have a technology or business model of strategic relevance to the energy industry. The investment in EIP allows us to collaborate with startups and industry peers to identify solutions for our customers and business.

The case study below illustrates how EIP is pursuing partnerships with these emerging companies.

Situation: The National Renewable Energy network estimates around 600,000 U.S. chargepoints will be needed within the next 9 years.

Task: EIP conducted an in-depth market analysis in collaboration with the strategic investor group and identified an opportunity to invest in companies supporting the transition to electric mobility. As a result of the analysis, EIP invested in Volta, now the most utilized EV charging network in the U.S., which also doubles as an ad platform. Action: Additionally, Southern Company partnered with the Volta to support the expansion of Level 2 chargers across the U.S.

Results: In 2021, EIP commissioned an Environmental Impact Assessment of the Volta solutions in operation. The study estimated Volta solutions had reduced CO2e emissions by 10,500 MT and saved more than 1.5 million gallons of gasoline.

EIP has invested in over 50 portfolio companies since its inception in 2015 and achieved several successful exits. These successes include Ring, the smart doorbell maker acquired in 2018 by Amazon, and Greenlots, the leading electric vehicle charging infrastructure company acquired by Shell in 2019. In 2021, lithium-ion battery recycler, Li-Cycle, also exited and later announced the company's fourth lithium-ion battery recycling facility would be located in Tuscaloosa, Alabama within the Alabama Power service territory.

Comment

Not applicable.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes



C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

According to the U.S. EPA, the transportation sector accounted for 27% of total greenhouse gas (GHG) emissions in the U.S. in 2020. Southern Company is exploring carbon reduction opportunities for the transportation sector through electric vehicle (EV), natural gas, and hydrogen research efforts.

In early 2021, Southern Company announced a partnership with five other energy companies to ensure EV drivers have access to a seamless network of charging stations connecting major highway system across the Southeast. This network is designed to support the estimated 18 million EVs the EEI estimated will be on U.S. roads by 2030.

More than 7 million vehicles are registered in states within the Southern Company retail electric service territory. The electric retail operating companies are installed charging stations to support the transition of those vehicles to electric. Currently, GPC has installed 59 public community chargers across Georgia.

At company locations, Alabama Power offers 166 charging stations for employees and visitors across 46 sites in Alabama. Georgia Power has installed at least 113 chargers for employees across 22 company locations in Georgia, and Mississippi Power has installed 27 electric vehicle chargers at company locations in Mississippi.

Additionally, in 2020, Southern Company announced an internal fleet electrification goal of converting 50% of the electric company fleet vehicles in the auto/SUV/minivan, forklift and ATV/cart/miscellaneous equipment segments to electric by 2030.



Natural gas infrastructure can be used to not only reduce the carbon footprint for energy delivery, but to also reduce GHG from other economic activity, like transportation. Compressed natural gas (CNG) vehicles reduce GHG emissions on a wellhead-to-wheel basis by 13-17% compared to gasoline and diesel. When CNG vehicles are fueled with RNG sourced from landfills, water treatment facilities, agricultural waste, etc., this reduction of GHG emissions increases up to 70 – 90%, or even carbon negative in the case of certain animal waste digesters. Since 2012, Atlanta Gas Light (AGL) has built approximately \$35 million worth of public and private CNG fueling stations for customers in Georgia through its tariff programs and turnkey construction contracts. There are 55 total CNG stations in Georgia, and 40 of these are on AGL's system. These stations range from large transit size stations to smaller installations for a handful of light duty vehicles.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,200,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The ultimate impact of electrifying and implementing additional CNG infrastructure to support decarbonization of the transportation sector will depend on various factors, such as state adoption and implementation of requirements, tax incentives, vehicle cost and the advancement of electric and alternative fuel vehicles and/or battery technology. To demonstrate the potential financial impact, we considered the impact of converting truck fleets in our electric service territories to fully electric trucks. The figure provided is based on the assumption that our electric power customers electrify their truck fleets at the same rate as the U.S. truck fleet at large, resulting in \$1.2 billion in cumulative revenue through 2040. The assumed rate of U.S. truck fleet electrification was determined based solely on vehicle economics. This estimation considered only one type of fleet truck and did not consider passenger vehicles.

Cost to realize opportunity

1,000,000



Strategy to realize opportunity and explanation of cost calculation

The \$1,000,000 estimated as the cost to realize the opportunity is reflective of the 2021 annual R&D budget dedicated to staff and project expenses (\$600,000), and EPRI research projects (approximately \$400,000). Additional costs associated with realizing this opportunity are not estimated here.

Below is an example of one project for electric transportation:

Situation: The Chatham Area Transit Authority (CAT), which serves the greater Savannah, Georgia area, identified a need for irregular bus routes to serve special events and for public safety.

Task: PowerSecure and Georgia Power developed a custom-designed fleet electrification solution for CAT.

Action: PowerSecure delivered a mobile bus charging unit and Georgia Power provided the depot electrical infrastructure upgrades. The project began commercial operation in March 2021.

Result: The project was described as "... a great collaborative effort between [the] Georgia Power and PowerSecure teams to deliver this customized solution and provide significant value to CAT..."

In February 2021, the City of Savannah, Georgia became the first city in Georgia to partner with Georgia Power Company for the Make Ready Electric Vehicle Infrastructure Program. Georgia Power established the Make Ready Program to invest a total of \$18 million in electric vehicle infrastructure by the end of 2022. This program, which is available to public and private entities, includes upgrades to infrastructure equipment, such as wires, transformers, and panels, for new customer-owned charging stations. Because this program removes one of the greatest barriers to businesses' installations of EV charging, electric transportation in Georgia can become more accessible for all customers across diverse geography, technology applications, and economic conditions.

Also in February 2021, the Alabama Department of Economic and Community Affairs (ADECA) announced plans to expand EV fast charging infrastructure along portions of Interstates 20 and 459. To further promote the growth of EVs, Alabama Power supported ADECA by matching up to 20% of the cost to install DCFCs (direct current fast chargers). This advanced technology charges many types of EV batteries in 20 to 30 minutes. Alabama Power supported the ADECA awards for DCFC infrastructure to be built along corridors within Alabama Power's territory with up to \$1 million in funding for qualifying customers.

Comment

In 2022, new grant funding opportunities are expected from the Alabama Department of Economic and Community Affairs (ADECA) and the federal Infrastructure Investment and Jobs Act (IIJA) to fund additional EV charging infrastructure throughout the State of Alabama. Alabama Power Company (APC) will consult and educate its service area customers considering applications for EV/ET infrastructure in 2022 in the following



ways:

- a. APC will offer customer consultation using data driven tools to assist EV infrastructure location customer investment evaluations.
- b. APC Power Delivery (PD) will continue to provide technology consultation, power distribution and overall education to customers seeking help evaluating their interest in EV/EV infrastructure.
- c. APC will continue to serve as an Advisory Group member of the Alabama group recommending the creation of the Alabama Electric Vehicle Infrastructure Plan (newly published in February 2022 by ADECA). This group will continue to consider updates to this plan.

Additionally, Southern Company and its electric operating companies, partnered with Volta to develop a software tool called PredictEV, which launched April 2022. This tool is purpose-built to enable employees to work with customers and help develop a fleet electrification strategy, where some of the metrics include cost and carbon emissions reductions. This tool is one example of how the Company is prepared to provide more consultative and personalized solutions to customers interested in electric transportation adoption.

We are also actively engaged in advancing the electrification of transportation and supporting CNG, hydrogen and LNG for road, maritime and high horsepower vehicles, which will reduce transportation costs for customers while reducing GHG emissions. This includes: promoting customer education and awareness; working with vehicle manufacturers and EPRI to bring viable on-road EV technologies to market; helping develop charging infrastructure and improve vehicle/grid integration plans for efficient distribution; and offering lower electricity rates and programs for off-peak usage, which helps commercial and industrial customers reduce their operating costs and environmental impact.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Other, please specify

Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon



Company-specific description

Southern Company faces risk from emerging regulation related to climate change and carbon pricing mechanisms. Southern Company is committed to providing clean, safe, reliable and affordable energy, with a goal of transitioning to net zero operations by 2050. A low-carbon future will require the integration of cost-effective energy storage with intermittent renewable generation. Southern Company has developed a diversified portfolio to mitigate any potential financial impacts and to take advantage of the demand for renewable energy. Southern Company has an entire operating company, Southern Power Company, to grow the low- and no-carbon fleet to address this demand.

Southern Power is a leading U.S. wholesale energy provider meeting the needs of municipalities, electric cooperatives, investor-owned utilities, and commercial and industrial customers. These partnerships have created a company with 2,395 MW of solar generation and more than 2,533 MW of wind generating capacity. In 2021, Southern Power announced the 300-MW Deuel Harvest Wind Farm and 118-MW Glass Sands Wind Facility.

In addition to expanding the renewable fleet, Southern Power is developing battery-based energy storage at its renewable generation facilities. In February 2021, Southern Power announced two 20-year power purchase agreements by Southern California Edison (SCE) for battery storage at both Southern Power's Tranquillity Solar Facility and Garland Solar Facility in California. The battery-based energy storage additions will enhance California's grid reliability by providing SCE and the California ISO (CAISO) with additional flexible resource capacity that will assist in further integrating intermittent renewable energy into the grid. Southern Power operates the solar projects and will be responsible for operating the energy storage projects upon completion. These two energy storage projects align with Southern Power's growth strategy of developing and acquiring projects covered by long-term contracts with strong credit counterparties.

PowerSecure, another Southern Company subsidiary, is the nation's leading distributed energy innovation company. PowerSecure's team of experts has developed, installed, managed and serviced 2.0+ GW of microgrid capacity over the past 20 years across more than 2,100 sites. PowerSecure continues to be the market leader in U.S. microgrid solutions deployment as reported by Wood Mackenzie in January 2021.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)



333,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Revenue from Southern Company subsidiary, PowerSecure, from energy efficiency services in 2021 = \$35,000,000.

Revenue from Southern Company subsidiary, PowerSecure, from microgrid-related services in 2021 = \$298,000,000.

Total impact in 2021: \$333,000,000.

This financial figure representing 100% of 2021 annual revenue for energy efficiency and microgrid services for PowerSecure is used here as a placeholder to demonstrate the potential financial impact from increased distributed generation to Southern Company. The opportunity for capital investment in low-emitting energy sources could be significant to the utility industry and the Southern Company system. The ultimate impact of low- to no-emission resources will depend on various factors, such as technology development, availability, cost and regulatory and tax drivers.

Cost to realize opportunity

1,750,000

Strategy to realize opportunity and explanation of cost calculation

The \$1,750,000 estimated as the cost to realize the opportunity is reflective of the 2021 annual R&D budget dedicated to renewables, energy storage and distributed generation. Additional costs associated with realizing this opportunity are not estimated here.

Southern Company is committed to providing clean, safe, reliable and affordable energy, with a goal of transitioning to net zero carbon operations by 2050. As an example of this commitment, Southern Power, a Southern Company subsidiary, continues to develop and expand renewable projects to meet the needs of customers.

Case Study

Situation: Southern California Edison and the California ISO (CAISO) established a need for battery-based energy storage additions to enhance California's grid reliability. Task: In February 2021, Southern Power was awarded two 20-year power purchase agreements by Southern California Edison, including for the addition of battery storage. Action: Southern Power implemented 160 MW battery storage at the company's Tranquillity and Garland Solar Facilities, becoming the first co-located solar and storage projects operating in the California market.

Result: In March 2022, the storage projects became operational, providing SCE and the CAISO with additional flexible resource capacity further support integration of intermittent renewable energy into the grid



In addition, Southern Company subsidiaries have partnered with the U.S. Army, Navy, Marine Corps and Air Force to develop innovative renewable energy generation projects on 33 Federal sites. As of 2020, more than 400 MW of military solar projects were online or under contract with Alabama Power, Georgia Power and Mississippi Power. This partnership with the Department of Defense helps meet the military's goals to improve mission resilience and support the development of new renewable generation resources nationwide. In general, the operating companies receive the renewable energy credits (RECs) from the projects which may be used to serve customers or sold to third parties for the benefit of customers.

Through our planning process and customer partnerships, Southern Company and its subsidiaries will continue to evaluate and develop program designs to meet customers' goals. We also have numerous R&D projects underway to determine the potential of emerging cost-effective renewable resources and technologies.

Comment

Overall, Southern Company's generation portfolio included more than 10,800 MW of renewable resources online in 2021 and that number will continue to grow as the Company's generating fleet is expected to have more than 14,600 MW of renewable resources by 2024. It should be noted when the Southern Company system's retail electric utility subsidiaries purchase energy from or build renewable generation sources, if they have the right to the RECs associated with these resources, they retain the ability to use the RECs to serve their customers with renewable energy or sell the RECs, either bundled with energy or separately, to third parties for the benefit of customers.

One way solar is growing is through our customer renewable programs, such as Georgia Power's Customer Renewable Supply Procurement (CRSP) program. The CRSP program supports commercial and industrial (C&I) customer's sustainability goals through renewable energy subscriptions. To date, eight customers have subscribed to 500 MW of renewable energy through CRSP. Additionally, in January 2022, Georgia Power filed its 2022 Integrated Resource Plan (IRP) with the Georgia PSC. Georgia Power proposed procurements of 2,300 MW of renewable energy. Of those procurements, 2,100 MW from Utility Scale procurements would be designated for renewable subscriptions by C&I customer through the new Customer and Renewable Energy Subscription (CARES) program. Modeled after CRSP, this program will support C&I, economic development, and municipalities, schools, and hospital (MUSH) customers' sustainability goals through renewable energy subscriptions. Georgia Power also has renewable options that allow customers the ability to support the growth of solar energy without installing solar on their premise. These options include Simple Solar, a REC-based program, and the Community Solar subscription program. Georgia Power purchases only the null energy output from some renewable generating facilities that have contracted to sell that energy to Georgia Power. Ownership of the associated RECs is specified in each respective power purchase agreement. The party that owns the RECs retains the right to use them.



Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Other, please specify

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues.

Company-specific description

Our long history of incorporating distributed generation into our energy mix began in the late 1970s and continues today. The integration of cost-effective energy storage with intermittent renewable generation is one of the key options that can help lower GHG emissions and provide an opportunity for growth through the sale of additional products and services.

Alabama Power and Georgia Power, in partnership with Southern Company R&D, have developed Smart Neighborhoods in Birmingham, Alabama and Atlanta, Georgia respectively, to evaluate how high-performance homes operate and benefit both customers and the utility. These Smart Neighborhood projects will help to develop new methods to integrate solar, battery storage and controllable electrical end-uses, such as water heaters, thermostats and electric vehicle chargers. These projects could provide a model for developing similar communities throughout the Southeast. Alabama Power's Smart Neighborhood Builder Program partners with homebuilders to build energy-efficient homes that feature advanced energy products and home automation.

Over the past 10 years, we have made major investments in smart grid technologies including deploying approximately 4.6 million smart meters, or advanced metering infrastructure, helping customers better manage their energy use and save money. We are also conducting collaborative, industry-wide research with EPRI, for the ongoing development of transmission system monitoring, diagnostics and visualization tools that will facilitate decisions and mitigation measures to enhance system performance, efficiency and reliability. We have numerous research and development projects underway across our system to develop technologies associated with renewable resources, energy storage and distributed generation. Research areas include solar photovoltaic (PV) deployment, operation and maintenance, solar resource forecasting, tall tower wind generation, and bulk-power system integration of variable generation sources.

These investments in new products and services, smart grid technologies and



renewables help both position us to be able to integrate higher penetrations of intermittent renewables and grow earnings for our investors, while maintaining grid stability and reliability.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

333,000,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact figure

Revenue from Southern Company subsidiary, PowerSecure, from energy efficiency services in 2021 = \$35,000,000.

Revenue from Southern Company subsidiary, PowerSecure, from microgrid-related services in 2021 = \$298,000,000.

Total impact in 2021: \$333,000,000.

The financial impact captured here is reflective of the 2021 revenues for energy efficiency and microgrid services from PowerSecure. The opportunity for capital investment in new products and services that meet customer preferences could be significant to the utility industry and the Southern Company system. Cost of capital investments is dependent on the speed of new low- to no- emission resource development, installation costs and customer preferences.

Cost to realize opportunity

2.200.000

Strategy to realize opportunity and explanation of cost calculation

The \$2,200,000 estimated as the cost to realize the opportunity is reflective of the 2021 annual R&D budget dedicated to end-use technologies. Additional costs associated with realizing this opportunity are not estimated here.

Southern Company subsidiaries are engaged in projects and initiatives to advance intermittent generation with storage, controllable end-use technologies, and smart grid



technologies. Southern Company subsidiary, PowerSecure, has cemented its reputation as a market leader in the distributed infrastructure market.

Situation: PowerSecure designs solutions to improve resiliency and redundancy, by providing more reliable power for customers that can be impacted by unanticipated power disruptions. In addition, PowerSecure solutions are designed to reduce energy consumption, provide clean energy options and the flexibility to reduce carbon footprint. Task: PowerSecure identified technology companies with which to partner. Action: In August 2021, PowerSecure announced a strategic partnership with Endeavour to scale the company's GridBlock platform for utilities. The "GridBlock technology simplifies integration of photovoltaics, energy storage and advanced DC services such as electric vehicle fleet charging, while also providing new tools to improve grid resiliency."

In October 2021, PowerSecure announced a collaborative relationship with Voltus, Inc., "a leading platform connecting distributed energy resources to electricity markets, delivering less expensive, more reliable, and more sustainable energy."

Result: Through the partnership with Endeavour, PowerSecure will integration and assembly of the GridBlock technology at the company's campus in Durham, North Carolina. The collaboration with Voltus will "enhance the revenue potential of PowerSecure's deployed microgrids across deregulated markets benefiting microgrid customers" by creating more value for PowerSecure's thousands of customer sites and introducing Voltus customers to the benefits of PowerSecure's unique distributed energy solutions.

As another example, PowerSecure partnered with the PGA TOUR to install sustainable, resilient and reliable microgrid solutions in its new Global Home Headquarters in September 2021. This system is equipped with a solar complex and backup generation to supply continuous power in the event of a storm or other power loss.

Comment

In 2019, Southern Power announced a partnership with esVolta, a prominent developer and owner of lithium-ion battery storage projects. The partnership includes up to four utility-scale energy storage projects located in California totaling more than 86 MWs and 345-megawatt hours.

Alabama Power's first Smart Neighborhood project in suburban Birmingham, Alabama opened in 2018 offering integrated high-performance homes, energy efficient systems and appliances, connected devices and a microgrid on a community-wide scale for the first time in the Southeast. The Smart Neighborhood uses leading-edge microgrid technology to support the community's energy needs. Made up of solar panels, battery storage and a backup natural gas generator, the microgrid was the first in the Southeast to support a residential community. In 2020, the project was awarded the 2020 Smart Grid award by POWER Magazine for its blend of modern technology and energy efficiency in the project. The neighborhood won a Top Project 2021 award from Environment + Energy Leader. Alabama Power has partnered with homebuilders to establish two other communities, with four additional communities under construction,



And most recently, Mississippi Power and Southern Company R&D also received approval from the Mississippi PSC to proceed with the Walnut Grove microgrid, a project that will study next-generation PV (bifacial panel at high DC:AC ratios) coupled with energy storage.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

Yes, we have a transition plan which aligns with a 1.5°C world

Publicly available transition plan

Yes

Mechanism by which feedback is collected from shareholders on your transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

We routinely engage with investors and other stakeholders individually, as part of the Climate Action 100+ initiative and through a well-established environmental stakeholder engagement forum. These discussions routinely include conversations about Southern Company's transition plans and alignment with a 1.5'C world. Members of our senior management and, in some cases, independent members of our Board of Directors, participate in these conversations. Specifically, we engage with the Climate Action 100+ group, or subsets of that group, two-four times per year. We meet with a broad group of environmental stakeholders representing local, state and federal interests once per year through an in-person forum and multiple times per year virtually. These engagements continue to influence our transition strategy as well as enhanced transparency related to climate issues and impacts.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your transition plan (optional)

2022 Just Transition Report: Engaging with Transparency (April 2022)

https://www.southerncompany.com/content/dam/southerncompany/sustainability/pdfs/Just-Transition-Report.pdf Net Zero Transition (March 2022)

https://www.southerncompany.com/sustainability/net-zero-and-environmental-priorities/net-zero-transition.html Decarbonization Pathways for Southern Company



Gas (March 2022) https://southerncompanygas.com/news/identifying-pathways-to-net-zero/

https://assets.ctfassets.net/ncgri9n8y2w0/ZjIVEo0e4Nl5kLtY640ff/4ae22fe434ba7102b8 f624ffc0fb1036/ICF-GAS-Report.pdf Implementation and action toward net zero (September 2020)

https://www.southerncompany.com/content/dam/southerncompany/pdfs/about/governan ce/reports/Net-zero-report_PDF1.pdf Planning for a low-carbon future (April 2018) https://www.southerncompany.com/content/dam/southern-company/pdf/corpresponsibility/Planning-for-a-low-carbon-future.pdf

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SO_2022JustTransititionReport-EngagingwithTransparency_April2022.pdf

SO_PlanningforaLow-CarbonFuture_April2018.pdf

SO_NetZeroTransitionWebsite_March2022.pdf

© GASDecarbonizationPathwaysforSouthernCompanyGasMarch2022.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative	

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate- related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios Bespoke transition scenario	Company-wide	1.5°C	Southern Company's state-regulated electric operating companies use a robust integrated resource planning process to quantitatively evaluate resource needs over a 30-year horizon. This process uses detailed resource expansion modeling, incorporating macro scale model data from EIA's Annual Energy Outlook, as well as recent commodity and economic indicators and policy trends, including pressure on CO2 emissions. Inputs and assumptions for this modeling are evaluated on an annual basis and are adjusted, as needed, to reflect updated trends and outlooks for relevant economic, technology and policy factors. Southern Company develops multiple scenarios that consider views of the future that vary with respect to degree of pressure on CO2 emissions, price of fuels, cost and performance of



		generating technologies and load growth. T scenarios include a set of views of potential CO2 emissions. In 2021, these scenarios is between \$0 to \$50 price per metric ton of C in addition to a view that set an annually de limit on CO2 emissions reaching net zero e 2050. This range of potential requirements by and aligned with national climate policy of including potential federal legislation and U regulation. In addition, Southern Company Gas completed decarbonization study in 2021 that identified for reaching net zero direct greenhouse gas by 2050. In addition, the study looked at pareduce emissions associated with customer gas. Two scenarios are based on increase efficiency, high efficiency gas heating technothe use of renewable natural gas. A third seriouses on policy-driven mandatory electrification space and water heating. The fourth scenar hybrid natural gas/electric approach for buil The study also identified pathways for reduce emissions associated with the usage of nating residential and commercial customers and a comprehensive pathway for Southern Compreduce both direct and indirect greenhouse emissions.	pressure on tarted O2 emitted, creasing missions in is informed discussion, .S. EPA eted a d pathways s emissions thways to rs' use of d building cology and cenario cation of rio uses a ding heating. cing indirect ural gas by a cany Gas to
Physical climate scenarios RCP 8.5	Business division	Southern Company has performed qualitatic climate impact assessments, such as the intextreme summer weather on electric load of the reliability of our territory's electric system was focused on electric demand for the Southern Company system using projected temperate based on the RCP 8.5 scenario. Since this work was focused on the electric system, we "Business activity" for "Scenario analysis consumers activity" for "Scenario analysis consumers activity" for perating companies in three include electric operating companies in four structural gas distribution companies in four structural gas distribution companies activity activity.	empact of emand and m. This work outhern ure data exploratory e selected everage." e diverse and e states, eates and competitive tomers y



telecommunications service business. Physical effects from weather and climate are key factors across our businesses and can impact both operations and infrastructure and are factored into our annual planning and strategy activities.

Southern Company's activity regarding physical climate risk related to climate change is developing and will continue to evolve. We recognize that changing climate conditions, including the potential for more frequent and/or intense extreme weather, make ensuring resiliency and adaptation to potential changes an imperative. Historical trends and projections, as well as locationally-specific and downscaled climate variables, are becoming more commonly available due to computational advancements and need for decisionrelevant climate information. Tools are emerging to evaluate these risks, but detailed, localized projections on extreme weather events that can impact our business (e.g., landfalling tropical cyclones, tornadoes) is limited and comes with a high degree of uncertainty. Awareness, confidence, and uncertainty in future trends vary by variable, requiring additional insights for decision making across the enterprise.

In 2022, Southern Company became a foundational member of EPRI's new Climate READi initiative, which has a goal to develop a broadly accepted common framework to facilitate analysis and application of appropriate climate data among all stakeholders to enhance the planning, design and operation of a resilient power system. This type of framework will provide co-benefits, such as hardening of infrastructure and supply chains, making them more resilient to other threats, such as cyber attacks.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions



- 1. What are possible pathways for the evolution of the generation fleet under different economic, technological, and policy assumptions?
- 2. What actions would reduce risks and are economic for customers, regardless of the path to net zero?
- 3. How should Southern Company incorporate risks from physical climate scenarios into its planning process?

Results of the climate-related scenario analysis with respect to the focal questions

- 1. Southern Company's resource planning scenarios show a range of responses to different economic, technology, and policy assumptions. Under increased pressure on CO2 emissions, scenarios show steady addition of cost-effective renewable energy, primarily solar and to a lesser extent wind, over time. These planning scenarios also show a significant amount of battery energy storage added for system reliability needs. These scenarios also show coal generation to phase out over time, but gas generation remains part of the portfolio, although to a lesser extent than it is today.
- 2. The planning scenarios, which include scenarios with increasing carbon pressure, indicate that the addition of solar generation and battery storage over time provides value for customers regardless of carbon policy. As an example action resulting from the scenario analyses, Georgia Power, in its 2022 Integrated Resource Plan, requested approval from the Georgia Public Service Commission to add 6,000 MW of renewable energy and 1,000 MW of battery storage by 2035, while phasing out its coal fleet.
- 3. Southern Company has and will continue to consider physical climate scenarios and other physical risk scenarios in its planning process in order to ensure the resiliency of its electric system. Southern Company's planning process includes resource adequacy assessments which exceed industry best practices. However, given the electric sector is facing a range of threats that are either new or more severe than experienced in previous years, the Company is actively establishing a Resiliency Program to supplement traditional reliability planning. The program will identify and seek to mitigate threats that are non-routine but result in disruptions that cannot be promptly restored. As a part of the Integrated Resource Planning process, the program will evaluate and benchmark current resilience capabilities, identify resilience threats and vulnerabilities, and prioritize actions and investments to improve the resilience of the system.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Beyond providing clean, safe, reliable, and affordable energy to customers, we are seeking new ways for our customers to efficiently use our products. Southern



Company's New Ventures Group is the Founding Partner of the utility-backed venture capital fund, Energy Impact Partners (EIP). EIP has made approximately 60 investments across the energy value chain, resulting in 2.8 million metric tons of CO2e emissions avoided, 253 million gallons of fuel saved and 3.2 million megawatt hours (MWh) of electricity saved in 2020.

EIP's Flagship Fund, Fund II, announced in November 2021, received \$1 billion in commitments and will focus on investing in venture and growth companies advancing critical climate solutions, such as supply chain decarbonization, electrification, mobility, tech-enabled infrastructure, reliability and resilience, and intelligent demand. Through Fund II, Southern Company will continue working with EIP to identify cutting-edge technologies to advance the zero-carbon economy and address global decarbonization goals.

We are a leader in offering innovative electric and natural gas efficiency programs that help our customers use energy more wisely. These programs have been successful across our state-regulated electric utilities and, since 2007, Southern Company has invested approximately \$1.2 billion in energy efficiency and demand response. The result of this investment is the ability to reduce peak demands by over 5.600 MW.

In 2011, Nicor Gas, a subsidiary of Southern Company Gas, set a goal to work with its customers to save more than 16 million therms annually through the energy efficiency program. That equates to a reduction of more than 840,000 metric tons of CO2 emissions. Looking forward, we are on a path to help our customers save even more and further reduce GHG emissions through our electric and natural gas energy efficiency offerings.

In 2021, Nicor Gas introduced a voluntary pilot program, TotalGreen, designed to be a flexible option for customers interested in offsetting the total net carbon dioxide emissions of 100% of their natural gas usage. As a service offered by Nicor Gas, the environmental benefits (i.e., emissions reductions) are achieved by Nicor Gas procuring the environmental attributes of RNG combined with verified



		carbon offsets and retiring those environmental benefits on behalf of participating customers.
Supply chain and/or value chain	Yes	Southern Company's Operations, Environmental and Safety Board Committee reviews significant operations which include fuel cost and availability. In the short-term, both Southern Company Gas and Southern Company have updated their natural gas bid selection process to offer a competitive edge to natural gas suppliers committed to GHG reductions in their own businesses. Southern Company Gas has been actively investing in infrastructure modernization and improvements to replace aging natural gas pipelines. Southern Company Gas is a founding member of ONE Future, which has members with a geographically diverse and material share of the U.S. natural gas supply chain, with
		a goal to collectively achieve a science-based rate of fugitive methane emissions across the entire natural gas supply chain (from production through consumption) equivalent to 1% or less of total natural gas production. Southern Company Gas is engaging in the ONE Future program to also promote the production of natural gas in a more sustainable way from its upstream suppliers.
		For example, Virginia Natural Gas (VNG), a subsidiary of Southern Company Gas, announced that it aspires to provide its customers with natural gas that is sourced, transported and distributed by companies that have pledged to reduce GHG emissions to less than 1% across the natural gas value chain. This announcement provides an example of the significant importance of supply chain in our business strategy. As a down payment on that pledge, since October 2019, VNG and fellow affiliate, Nicor Gas, have purchased almost 19 billion cubic feet of Next Generation Natural Gas, natural gas supply sourced from select lowfugitive emission wells.
		In 2020, Southern Company Gas joined the Natural Gas Supply Collaborative, a voluntary organization of natural gas energy companies that are promoting safe and responsible practices for natural gas supply.
Investment in R&D	Yes	For more than five decades, Southern Company has actively engaged in robust, proprietary R&D that grows the value of energy services to customers. As part of our approach to reducing carbon emissions, approximately two-thirds of R&D spend is focused on lower carbon-emitting



	technologies and is a significant portion of our business strategy.
	Southern Power participates in the industry-advocate partnership Renewable Energy Wildlife Institute, formerly named the American Wind Wildlife Institute, which is conducting research to better understand wind energy's risks to wildlife and develop solutions to avoid, minimize, and offset those impacts. Southern Company is also an active participant and a significant funder of Electric Power Research Institute (EPRI), whose membership includes utilities throughout the world, as well as other R&D organizations like Gas Technology Institute. Southern Company R&D has identified critical technology pathways necessary to achieve this outcome, and is further refining its strategy for a net zero future to focus on the following objectives: > Deliver an affordable, reliable, net zero energy system > Optimize energy delivery systems to support sector transformation > Serve customer energy needs holistically.
Yes	No one in the U.S. is doing more in pursuing a full portfolio energy strategy. We believe developing and maintaining a diversified energy portfolio is essential to successfully reducing carbon emissions while maintaining reliability and affordability. As with R&D, diversification of our energy portfolio is a significant portion of our business strategy around reducing GHG emissions. Our portfolio was initially founded on zero-carbon hydroelectric generation and has grown to include nuclear, landfill gas, solar, wind, energy efficiency programs, demand response, coal, natural gas, and distributed resources. Over the last decade, we have significantly transformed our electricity generation mix. Recent generation decisions and environmental compliance strategies have led to the following: • Since 2007, we have retired or converted to gas approximately 9,600 MW of coal and oil generation capacity representing more than 73% of our coal generation units and more than 50% of our coal generation capacity. The trends of additional coal generation retirements and renewable generation additions are projected to continue. • We invest in a diverse portfolio of low-carbon and carbonfree generation assets to serve customers and communities with a focus on maintaining reliability and affordability while
	Yes



reducing carbon emissions. Our current portfolio of more
than 14,900 MW of carbon-free resource capacity has
established a foundation enabling us to continue our carbon
reduction efforts. We anticipate adding approximately 3,500
MW of additional renewable generation sources by 2024.
Along with our partners, we are building the first new
nuclear units in the U.S. in more than 30 years. The units
will add 1,000 MW to our existing 3,700 MW portfolio of
carbon-free nuclear generation.
Investing \$13 billion in capital improvements for our
transmission and delivery system to ensure resilient, fully
integrated, self-healing energy delivery grids for unrestricted
creation and use of low and no carbon energy sources.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital expenditures Acquisitions and divestments Access to capital Assets	The following financial planning elements are considered over the short, medium, and long term time horizons, depending on the financial planning element. Revenues: Our energy infrastructure portfolio of primarily rate-regulated assets and assets under long-term contracts is designed to produce regular, predictable and sustainable earnings. The Southern Company system has made significant investment over the past decade in low-and no-carbon resources. We expect that if our subsidiaries continue to make major energy decisions that are in the best interest of customers that consider fuel and carbon risks and that are approved by the state regulators, each subsidiary will receive fair regulatory treatment regarding its regulated assets. We will continue to seek out opportunities outside of our rate-regulated assets to grow our renewable and energy storage portfolio. Operating costs / Indirect Costs: Our R&D spend, which is approximately \$50 million per year, including the EPRI applied dollars, continues to significantly increase its focus on low-, zero- and negative- carbon technologies. Capital expenditures: Through our subsidiaries, we are investing in developing low-carbon and carbon-free resources as evidenced by the addition of over 350 MW of new solar and over 300 MW of wind



generation in 2021. Our current portfolio of more than 14,900 MW of carbon-free resource capacity has established a foundation upon which to continue our carbon reduction efforts. In addition to spending more on lower or zero carbon generation options, we do not intend to invest further in our existing thermal coal fleet, unless the investment ensures safety, affordability or reliability to serve customers or to comply with federal or state laws. Over more than 20 years, Southern Company Gas invested greater than \$2 billion in pipeline and infrastructure replacements, and these improvements have reduced fugitive methane emissions.

Acquisitions and divestments: As mentioned previously, we are helping to ensure that our customers can reliably and efficiently use our product. In May 2016, we acquired PowerSecure, which provides energy solutions to customers in the areas of distributed generation, energy storage and renewables and energy efficiency. With over 1.86 GW of distributed energy resources under management, PowerSecure continues to grow its footprint as the nation's leading distributed energy innovation company. Over the last decade, Southern Company has significantly transformed the electricity generation mix. As of July 2021, generation decisions and environmental compliance strategies have led to approximately 9,600 MW of coal- and oil-related generation retirements or conversions since 2007 and approximately 3,400 MW of coal capacity switched to use lower-carbon natural gas as a primary fuel since 2007.

Access to capital: Impacted investors and credit rating agencies are increasingly focused on ESG issues, including climate-related issues. In 2018, we published our "Planning for a Low Carbon Future" report to enhance the information for investors related to the risks and opportunities in a low-carbon transition. We continue to communicate through disclosures like the CDP, "Planning for a Low Carbon Future" report, and the addendum "Implementation and Action Toward Net Zero" report that we published in 2020 to transparently convey our progress and forward-looking strategy. Loss of access to short-term money markets and long-term capital markets would significantly impact our business by reducing project funding options or increasing the cost of borrowing.

Assets: We have seen a positive impact to our assets. We invest in a diverse portfolio of low-carbon and carbon-free generation assets to serve customers and communities.

Liabilities: Not impacted. While each electric utility company in the Southern Company system owns and operates its generating resources, Southern Company's retail electric generating fleet is economically



dispatched to serve customer needs regardless of the location or company ownership of any specific generation unit. A range of planning scenarios is established, developed and modeled through the work of a coordinated planning team consisting of internal subject matter experts, company planning managers, and external experts that provide input on key parts of the analysis. A major goal of the resource planning process and environmental compliance strategy process is to make fully informed, risk adjusted decisions that are in the best interest of our customers.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

Yes

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.

Financial Metric

Revenue

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

11

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

Providing clean, safe, reliable and affordable energy to customers is fundamental to Southern Company's mission. Our growing portfolio of zero carbon resources plays an integral role in helping us meet these objectives as well as our net zero by 2050 goal, which is in direct alignment with the commitments of the Paris Agreement.

Our electric utilities are regulated by state public service commissions (elected or appointed officials) that approve new resources, retirement of existing resources (varies



by state public service commission) and related cost recovery rates. Our fleet transition will be subject to regulatory oversight in the jurisdictions where we operate.

Southern Company expects to meet its net zero goal by utilizing a variety of pathways including reduced reliance on coal-fired generating assets, use of natural gas, further growth in our portfolio of zero carbon resources, enhanced energy efficiency initiatives, negative carbon solutions, and continued investment in R&D of clean energy technologies.

Southern Company is closely considering the best financial metrics to demonstrate business alignment with our net zero goal. However, there are some nuances related to each approach that might not allow stakeholders to clearly connect our net zero goal and business strategy with the information presented by a discrete data set. For example, our generating mix is projected to shift toward renewables, though this positive shift's impact on capital expenditures for new generation will be determined by the future balance of purchase power agreements (non-company owned assets) and company-owned renewable assets. As a result, our generating mix is projected to shift toward renewables, though this positive shift may not be directly reflected in capital expenditures for new generation since we may not construct and own all underlying resources.

When considering the revenue metric, the percentage of zero carbon revenues relative to other fuel sources could shift meaningfully year-to-year as a percentage of total revenue since fuel prices are a component of revenue and driven by macro-economic factors. As such, it may not be indicative of our strategy to reach our net zero goal.

When looking at our electric utilities, we are choosing to disclose revenue as the indicator of our path to net zero (recognizing the potential for fluctuations noted above). We assess both coal-fired generation and carbon-free generating resources as a percent of revenue. Coal-fired generation as a percent of revenue has declined from 14.0% in 2019 and 2020 to 13.4% in 2021. We began assessing carbon-free generation as a percent of revenue in 2021. This includes revenue from both companyowned and contracted generating resources including nuclear, hydropower, wind, solar, and battery storage. Revenue from carbon-free generation as a percent of revenue was 11.0% in 2021.

The declining trend of coal-based generation and the increasing trend of carbon-free generation supports Southern Company's net zero goal. Several factors in the 2022-2030 timeframe are likely to contribute to a continuation of these trends: 1) regulatory approval to [contract for] an additional 6,000MW of renewables by 2035, 2) expected inservice of two new nuclear units currently under construction, 3) regulatory approval to add battery storage, and 4) pending decisions (varies by operating company and state) to retire or convert to natural gas all but eight coal-fired generating units by 2028.



C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2018

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2 accounting method

Scope 3 category(ies)

Base year

2007

Base year Scope 1 emissions covered by target (metric tons CO2e)

156,471,219

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

156,471,219



Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2050

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 82,295,991

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

82,295,991

% of target achieved relative to base year [auto-calculated]

47.405029803

Target status in reporting year

Underway

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Target ambition



Please explain target coverage and identify any exclusions

In 2018, we set emission reduction goals that were aligned with strategies designed to address the long-term reduction of GHG emissions and our commitment to a leadership role in developing solutions that make technological and economic sense. The goals established in 2018 were to reduce GHG emissions by 50% (from 2007 levels) by 2030 and to achieve low-to-no GHG emissions by 2050. In 2020, we revised our long-term goal to achieve net zero GHG emissions by 2050. Our 2030 and 2050 goals encompass enterprise-wide Scope 1 emissions from our electric and natural gas operations.

Although these goals do not meet CDP's definition of a science-based target, our goals are aligned with science-based pathways to potentially limit the global average temperature rise to less than 1.5 degrees Celsius above pre-industrial times (see EPRI's "Grounding Decisions: A scientific foundation for companies considering global climate scenarios and greenhouse gas goals" (2018) and "Review of 1.5°C and Other Newer Global Emissions Scenarios: Insights for Company and Financial Climate Low-Carbon Transition Risk Assessment and Greenhouse Goal Setting" reports (2020)). Our goals are informed by the results of our integrated resource plans, which are designed to achieve an appropriate mix of generation resources to meet our customers' energy and capacity needs in a clean, safe, reliable and affordable manner.

Southern Company will continue to use a portfolio approach as we seek to decarbonize. We expect our path to net zero to be comprised of several key elements: continued transition away from coal, utilization of natural gas to enable the fleet transition, further growth in our portfolio of zero-carbon resources, negative carbon solutions, enhanced energy efficiency initiatives, and continued investment in R&D focused on clean energy technologies. Our approach is driven by thoughtful scenario planning, long-term integrated resource plans, and constructive regulatory decision-making. We are also engaging with policymakers, customers, and other stakeholders to support outcomes that lead to a net zero future.

Plan for achieving target, and progress made to the end of the reporting year

To reach our net zero by 2050 goal, we are focused on transitioning our generating fleet and making the necessary related investments in our transmission and distribution grids. Components of Southern Company's decarbonization strategy include: reduced reliance on coal-fired generating assets, use of natural gas to enable the low-carbon energy transition, further growth in our portfolio of zero-carbon resources, enhanced energy efficiency initiatives, negative carbon solutions and continued investment in R&D of clean energy technologies.

In addition to focusing on carbon emissions from our generating fleet, we continue to invest in infrastructure and technologies to further reduce methane and other GHG emissions from our natural gas businesses. While fugitive methane emissions represent approximately 1% of Southern Company's direct GHG emissions, Southern Company Gas has led the industry in fostering significant progress to voluntarily minimize fugitive methane emissions across the natural gas supply chain, from wellhead to burner tip.



We have made significant progress toward our interim goal to reduce GHG emissions by 50% from 2007 levels by 2030, as we move forward to our long-term goal of net zero by 2050. We reported that 2021 emissions were 47% below 2007 levels, and we expect to consistently achieve GHG reductions of greater than 50%, and possibly as early as 2025, a full five years earlier than our interim goal. In 2021, we indicated our intent to retire or repower with natural gas a significant portion of our remaining coal generating fleet. Subject to regulatory approval, we may have only eight coal units remaining by the end of 2028, down from 66 in 2007, with further reductions expected by 2035. We added 1,100 MW of renewable generation and energy storage in 2021, including projects at our regulated subsidiaries and Southern Power.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 2

Year target was set

2018

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2 accounting method

Scope 3 category(ies)

Base year

2007

Base year Scope 1 emissions covered by target (metric tons CO2e)

156,471,219

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

156,471,219



Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

78,235,609.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 78,235,609.5

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

82,295,991

% of target achieved relative to base year [auto-calculated]

94.8100596059

Target status in reporting year

Underway

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Target ambition



Please explain target coverage and identify any exclusions

In 2018, we set GHG emission reduction goals that were aligned with strategies designed to address the long-term reduction of GHG emissions and our commitment to a leadership role in developing solutions that make technological and economic sense. The goals established in 2018 were to reduce GHG emissions by 50% (from 2007 levels) by 2030 and to achieve low-to-no GHG emissions by 2050. In 2020, we revised our long-term goal to achieve net zero GHG emissions by 2050. Our 2030 and 2050 goals encompass enterprise-wide Scope 1 emissions from our electric and natural gas operations.

Although these goals do not meet CDP's definition of a science-based target, our goals are aligned with science-based pathways to potentially limit the global average temperature rise to less than 1.5 degrees Celsius above pre-industrial times (see EPRI's "Grounding Decisions: A scientific foundation for companies considering global climate scenarios and greenhouse gas goals" (2018) and "Review of 1.5°C and Other Newer Global Emissions Scenarios: Insights for Company and Financial Climate Low-Carbon Transition Risk Assessment and Greenhouse Goal Setting" (2020) reports. Our goals are informed by the results of our integrated resource plans, which are designed to achieve an appropriate mix of generation resources to meet our customers' energy and capacity needs in a clean, safe, reliable and affordable manner.

Southern Company will continue to use a portfolio approach as we seek to decarbonize. We expect our path to net zero to be comprised of several key elements: continued transition away from coal, utilization of natural gas to enable the fleet transition, further growth in our portfolio of zero-carbon resources, energy storage, negative carbon solutions, enhanced energy efficiency initiatives and continued investment in R&D focused on clean energy technologies. Our approach is driven by thoughtful scenario planning, long-term integrated resource plans, and constructive regulatory decision-making. We are also engaging with policymakers, customers and other stakeholders to support outcomes that lead to a net zero future.

Plan for achieving target, and progress made to the end of the reporting year

To reach our net zero by 2050 goal, we are focused on transitioning our generating fleet and making the necessary related investments in our transmission and distribution grids. Components of Southern Company's decarbonization strategy include: reduced reliance on coal-fired generating assets, use of natural gas to enable the low-carbon energy transition, further growth in our portfolio of zero-carbon resources, enhanced energy efficiency initiatives, negative carbon solutions and continued investment in R&D of clean energy technologies.

In addition to focusing on carbon emissions from our generating fleet, we continue to invest in infrastructure and technologies to further reduce methane and other GHG emissions from our natural gas businesses. While fugitive methane emissions represent approximately 1% of Southern Company's direct GHG emissions, Southern Company Gas has led the industry in fostering significant progress to voluntarily minimize fugitive methane emissions across the natural gas supply chain.



We have made significant progress toward our interim goal to reduce GHG emissions by 50% from 2007 levels by 2030, as we move forward to our long-term goal of net zero by 2050. We reported that 2021 emissions were 47% below 2007 levels, and we expect to consistently achieve GHG reductions of greater than 50%, and possibly as early as 2025, a full five years earlier than our interim goal. In 2021, we indicated our intent to retire or repower with natural gas a significant portion of our remaining coal generating fleet. Subject to regulatory approval, we may have only eight coal units remaining by the end of 2028, down from 66 in 2007, with further reductions expected by 2035. We added 1,100 MW of renewable generation and energy storage in 2021, including projects at our regulated subsidiaries and Southern Power.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production Target(s) to reduce methane emissions

Net-zero target(s)

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2020

Target coverage

Business division

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source
Low-carbon energy source(s)



Base year

2020

Consumption or production of selected energy carrier in base year (MWh)

% share of low-carbon or renewable energy in base year

22

Target year

2030

% share of low-carbon or renewable energy in target year

50

% share of low-carbon or renewable energy in reporting year

21

% of target achieved relative to base year [auto-calculated]

0

Target status in reporting year

Underway

Is this target part of an emissions target?

Vehicle fleet electrification within Southern Company's operating footprint does contribute to the overarching target of sustainably achieving 50% reduction in GHG emissions by 2030. At this time, data are not collected for the "Consumption or production of selected energy carrier in base year (MWh)."

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

The Southern Company's internal fleet vehicle electrification goal includes plans to convert 50% of its electric companies' fleet vehicles in the auto/SUV/minivan, forklift and ATV/cart/miscellaneous equipment segments to electric by 2030. This goal is part of a larger focus on electrification of the transportation industry and commitment to sustainability and clean energy.

Plan for achieving target, and progress made to the end of the reporting year

During National Drive Electric Week 2020, Southern Company announced an internal fleet vehicle electrification goal to convert 50% of vehicles to electric by 2030. The percentage of electric vehicles declined from 22% in 2020 to 21% in 2021 due to a slight change in the composition of the fleet. The Southern Company subsidiaries will continue to replace passenger vehicles, forklifts, and other equipment to electric to achieve the goal in 2030.

List the actions which contributed most to achieving this target



C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2014

Target coverage

Business division

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Methane reduction target

Other, please specify

Methane leak rate from gas distribution

Target denominator (intensity targets only)

Other, please specify
Throughput of natural gas

Base year

2012

Figure or percentage in base year

0.52

Target year

2025

Figure or percentage in target year

0.44

Figure or percentage in reporting year

0.195

% of target achieved relative to base year [auto-calculated]

406.25

Target status in reporting year

Achieved

Is this target part of an emissions target?



The methane reduction target is part of a larger Distribution Sector target which is a part of the overall One Future goal of a natural gas value chain methane intensity that is 1% or less.

Is this target part of an overarching initiative?

Other, please specify
ONE Future Program

Please explain target coverage and identify any exclusions

Southern Company Gas is a founding member of the ONE Future program, a coalition of companies across the natural gas value chain focused on identifying policy and technical solutions that yield continuous improvement in the management of methane emissions associated with the production, processing, transmission, and distribution of natural gas. If adopted widely, their system of emissions management could lower total methane emissions to less than one percent of gross production and delivery – the point of which the use of natural gas for any purpose provides a clean and immediate GHG-reduction benefit as compared to any other fossil fuel in any other application.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

Over more than 20 years, Southern Company Gas has invested greater than \$2 billion in pipeline and infrastructure replacements, and these improvements have reduced its annual methane emissions for its distribution systems by approximately 50% while accommodating an approximate 20% growth in its distribution system.

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Target year for achieving net zero

2050

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Please explain target coverage and identify any exclusions



Southern Company has set a GHG emissions reduction goal of net zero emissions by 2050. The Company also has reaffirmed its intermediate goal of a 50% reduction of GHG emissions from 2007 levels by 2030. These are enterprise-wide goals that encompass the Scope 1 emissions from our electric and natural gas operations. All of Southern Company's operations are within the United States.

Although these goals do not meet CDP's definition of a science-based target, our goals are aligned with science-based pathways to potentially limit the global average temperature rise to less than 1.5 degrees Celsius above pre-industrial times (see EPRI's "Grounding Decisions: A scientific foundation for companies considering global climate scenarios and greenhouse gas goals" (2018) and "Review of 1.5°C and Other Newer Global Emissions Scenarios: Insights for Company and Financial Climate Low-Carbon Transition Risk Assessment and Greenhouse Goal Setting" (2020) reports.

Based on our research and planning, stockholder and stakeholder dialogues, we believe our path to net zero by 2050 will be achieved through using natural gas to enable transition to a lower emitting generating fleet, expanding zero-carbon resources, including renewables and nuclear, energy storage, enhancing energy efficiency programs, and including negative carbon strategies. Additionally, we will continue to invest in reliability and resilience. We continue to evaluate ways to achieve our goals and have engaged in the evolving dialogue regarding the global need to reach net zero emissions by 2050.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional) Not applicable.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.



	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	1	0
Implementation commenced*	0	0
Implemented*	7	584,254
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy generation Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

208,331

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Southern Company subsidiary, Southern Power, is a leading U.S. wholesale energy provider that has been acquiring and developing renewable generating facilities for over a decade. In 2021, Southern Company subsidiaries completed 5 solar projects across the country.



It should be noted that, generally, with respect to renewable energy generated or purchased by the state-regulated electric operating companies, the state-regulated electric operating companies retain the right to use the renewable energy to serve customers or to sell the energy and associated renewable energy credits, together or separately, to third parties for the benefit of customers. Southern Company receives regulatory and program approvals through PSCs in respective retail operating company states prior to entering into any agreements to build or purchase renewable energy. While "voluntary" was selected, it should be noted that in some cases builds and purchases were developed as projects in conjunction with regulatory orders and approvals from the respective PSCs. Retail operating companies continue to pursue the development of zero carbon, solar PV installations. It should be noted that, generally, with respect to renewable energy generated by Southern Power, the renewable energy credits are sold to their customers as part of long-term energy transactions or other third parties. In either case, the purchaser generally retains the rights to use the RECs or resell them.

Initiative category & Initiative type

Low-carbon energy generation Wind

Estimated annual CO2e savings (metric tonnes CO2e)

375,923

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Southern Company subsidiary, Southern Power, is a leading U.S. wholesale energy provider that has been acquiring and developing renewable generating facilities for over a decade. In 2021, Southern Company subsidiaries completed 2 wind projects across the country.



It should be noted that, generally, with respect to renewable energy generated or purchased by the state-regulated electric operating companies, the state-regulated electric operating companies retain the right to use the renewable energy to serve customers or to sell the energy and associated renewable energy credits, together or separately, to third parties for the benefit of customers. Southern Company receives regulatory and program approvals through PSCs in respective retail operating company states prior to entering into any agreements to build or purchase renewable energy. While "voluntary" was selected, it should be noted that in some cases builds and purchases were developed as projects in conjunction with regulatory orders and approvals from the respective PSCs. Retail operating companies continue to pursue the development of zero carbon, solar PV installations. It should be noted that, generally, with respect to renewable energy generated by Southern Power, the renewable energy credits are sold to their customers as part of long-term energy transactions or other third parties. In either case, the purchaser generally retains the rights to use the RECs or resell them.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Decisions made by an electric and gas operating company regarding its assets, including those requiring specific state regulatory (i.e., PSC) approval, must be made in the best interest of its customers, taking into consideration a wide variety of factors, and based on the best information available at the time of the decision. EPA regulations governing emissions from existing electric generators could drive investment in the future.
Dedicated budget for energy efficiency	Across our state-regulated electric utilities, since 2000, energy efficiency and demand response programs have helped reduce peak demand for electricity by more than 5,600 MW and avoid more than 3 billion kilowatt hours (kWh) of energy use. Additionally, since 2011, Southern Company Gas's subsidiary, Nicor Gas, has successfully implemented the Nicor Gas Energy Efficiency Program. Between 2011 and 2021, Nicor Gas invested more than \$411 million in energy efficiency for natural gas customers. In addition, the Nicor Gas Energy Efficiency Program is expected to result in a cumulative \$1.76 billion in new economic impact (direct, indirect and induced spending) through 2021 and is forecasted to support 11,178 jobs through 2021. The Program has helped Nicor Gas customers save more than 197 million net therms and avoid more than 1 million metric tons of CO2 emissions. This is equivalent to the emissions generated by more than 220,000 passenger vehicles over the course of a year. The program has also supported 1.17



	million home and business customers, delivering \$217 million in rebates and incentives to customers."
Dedicated budget for low-carbon product R&D	For more than five decades, Southern Company has actively engaged in robust R&D that grows the value of energy services to customers. Approximately two-thirds of our current R&D spend is focused on lower carbon-emitting technologies or carbon removal technologies.
Internal price on carbon	Our integrated resource planning process occurs annually – allowing updates to the scenarios and associated CO2 prices, as well as incorporation of recent commodity, economic or policy indicators. We use a robust scenario planning process. We continue to evaluate this process on an annual basis, and it is therefore subject to change.
Internal incentives/recognition programs	To demonstrate its commitment to the GHG reduction goals and facilitate the execution of our business strategy to address the long-term reduction of carbon emissions, the Board tied a significant portion of the CEO's three year LTI award for 2019, 2020, 2021, and 2022 to the achievement of GHG reduction goals. Ten percent of the CEO's LTI awards are aligned with the GHG reduction goals, with each LTI award equivalent to a potential payout of up to \$2 million of incentive compensation. Beginning with the 2022-2024 performance period, this GHG reduction metric is also part of the long-term equity incentive award for the CFO and the EVP of Operations. Beginning in 2022, the Compensation Committee added a new net zero availability metric to the Company's PPP that measures the availability of net zero generation resources, including nuclear, solar, wind and hydro, that applies to almost 15% of our employees across the Southern Company system.
Partnering with governments on technology development	Southern Company R&D has worked for almost 50 years to develop new technologies across the production, delivery and end-use of energy. Since its formation, the DOE has been a major research partner with Southern Company in defining R&D needs, leveraging public-private funding and understanding and implementing results. In addition to DOE and its national laboratories, Southern Company R&D actively collaborates with other utilities, universities, technology developers and industry organizations, highly leveraging both funding and expertise. These long-standing partnerships address the industry's most significant challenges – including the reduction of carbon emissions – and advance the most promising technology options for the energy sector. Furthermore, this collaborative model allows the matching of internal research investments- on average, dollar for dollar – through public-private partnerships and other forms of external cost-sharing. As a result, Southern Company's R&D



organization has delivered significant benefits across the enterprise
that, over the last 10 years, have averaged at least 10 times its
investment.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Climate Bonds Taxonomy

Type of product(s) or service(s)

Power

Other, please specify

Solar PV, Onshore Wind, Hydropower, Nuclear, Biomass

Description of product(s) or service(s)

Our primary product is electricity sold to customers. Our GHG emission reduction strategy includes pursuing a diverse portfolio of energy resources. Our retail electric subsidiaries provide low carbon generation to customers through hydropower, nuclear, and other carbon-free generation. These operating companies are also adding solar capacity as approved by state PSCs. Our subsidiary, Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy and battery energy storage projects, and sells electricity at market-based rates in the wholesale market. Southern Power's strategy is to provide no- and lower-GHG emission generation resources through long-term contracts with strong credit counterparties. Southern Power currently owns nearly 5,000 MW of commercial wind and solar capacity. By selling the electricity and the associated RECs, Southern Power enables its renewable energy customers to avoid GHG emissions.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)



Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

Providing low-carbon generation to customers for 13,895 MW of capacity

Reference product/service or baseline scenario used

Company-wide emission rate from all generating sources providing electricity to customers

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

25,008,144

Explain your calculation of avoided emissions, including any assumptions

Avoided emissions calculated by multiplying the net generation (MWh) from each low-carbon generating unit by the company-wide emission rate from all generating sources providing electricity to customers (metric tons CO2e/MWh) to get avoided emission in metric tons CO2e.

Southern Company's retail operating companies have built, own, and operate a fleet of low- and zero-carbon facilities and also purchase energy and RECs from zero-carbon facilities owned by third parties. The retail operating companies are generally able to use the RECs from these facilities to offer their customers the option to match some or all of their retail load with RECs, a low-carbon product. The retail operating companies can also sell the unused RECs to third parties for the benefit of customers. Because these resources (both owned and purchased) are part of each company's wholesale portfolio and the sale of energy and RECs (both to retail customers and wholesale customers) are comingled with all other wholesale sales, our subsidiaries do not have a percentage of revenues that can be claimed for these activities for any specific set of customers. These activities are not, however, pursuant or implemented to satisfy any regulatory or other reporting requirements but rather as a means to satisfy customer demand and as an added benefit to achieve Company-wide goals to reduce GHG emissions and diversify fuel sources to the benefit of customers.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

11.8

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.



Southern Company Gas has been a leader in the natural gas industry in fostering significant progress to minimize fugitive methane emissions. Its distribution system operates at almost 99.8% efficiency in its delivery of natural gas. Intensity is derived from the ONE Future Methane Intensity Protocol (2020). Over more than 20 years, Southern Company Gas has invested greater than \$2 billion in pipeline and infrastructure replacements, and these improvements have reduced its annual methane emissions for its distribution systems by 50% while accommodating an approximate 20% growth in its distribution system. We continue to invest in advanced methane detection and reduction across the Southern Company Gas footprint.

Our methane emissions reductions efforts are multi-faceted and include not only infrastructure upgrades and leak detection and repair programs, but also include evaluations of how operational changes, such as how we manage blowdowns, could impact our reduction efforts. For example, blowdowns, whether for maintenance, during normal operations, or in emergencies, can be a source of methane emissions. As such, we are implementing more broadly in our operations several mitigation methods to eliminate or reduce blowdown emissions during natural gas pipeline projects and activities. These methods include segment isolation, drawdown, temporary compression and, if needed, flaring.

Another important part of our approach to reducing emissions is using advanced leak-detection technologies and predictive analytics to minimize our third-party damage rate to reduce the unplanned release of natural gas.

Southern Company Gas also demonstrates leadership across the value chain as a founding member of ONE Future. The ONE Future Coalition is a group of natural gas companies working together to voluntarily reduce methane emissions across the natural gas supply chain. With operations across every part of the natural gas value chain, ONE Future is focused on identifying policy and technical solutions that yield continuous improvement in the management of methane emissions associated with the production, processing, transmission, and distribution of natural gas. Since formation, it has grown from 8 companies to over 50 companies, accounting for some of the largest natural gas producers, transmission, and distribution companies in the U.S. ONE Future members operate in many of the production basins, and other segments of the value chain operate in multiple regions of the country; hence, ONE Future's data represent a geographically diverse and material share of the U.S. natural gas supply chain. By increasing suppliers involved in the initiative, Southern Company can increase availability of ONE Future suppliers in its service territory.

For example, Virginia Natural Gas (VNG), a subsidiary of Southern Company Gas, announced that it aspires to provide its customers with natural gas that is sourced, transported and distributed by companies that have pledged to reduce GHG emissions to less than 1% across the natural gas value chain. This announcement provides an example of the significant importance of supply chain in our business strategy. As a down payment on that pledge, since October 2019, VNG and fellow affiliate, Nicor Gas, have purchased almost 19 billion cubic feet of Next Generation Natural Gas, natural gas supply sourced from select low-fugitive emission wells. In addition, in July 2021, Nicor received approval for a renewable natural gas pilot program for third party producers to capture the methane produced by the decomposition of organic waste and convert it into renewable natural gas and interconnect to the Nicor system.



Both Southern Company Gas and Southern Company's electric operations have updated their natural gas bid selection process to offer a competitive edge to natural gas suppliers committed to reducing fugitive methane emissions.

Southern Company Gas encourages continuous improvement in upstream emissions reductions by giving preference to demonstrated environmental performance. Southern Company Gas is a member of the Natural Gas Supply Collaborative, a voluntary organization of 17 natural gas energy companies that are promoting safe and responsible practices for natural gas supply.

Southern Company Gas also utilizes artificial intelligence to help protect critical infrastructure. This technology also helps the gas utilities reduce greenhouse gas emissions by predicting where damage could possibly occur and prevent the escape of gas (methane) caused by third-party infrastructure damage.

Improvements put into place across the whole value chain will positively influence the supply side for our electric and gas utilities.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?		
Row 1	No		



C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2007

Base year end

December 31, 2007

Base year emissions (metric tons CO2e)

156,471,219

Comment

Baseline emissions include equity owned assets for electric operations (including transmission and distribution). Gas operations baseline emissions are not yet available. Baseline emissions were updated in 2021 to reflect more accurate baseline data; this was not a material change from the prior year's reported baseline.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

207,136

Comment

Southern Company's Scope 2 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned facilities. The GHG emissions included in Scope 2 are emissions from electricity purchased for Company consumption at Company-owned locations that are located outside of Southern Company's retail electric service territory and line losses from Southern Company's transmission and distribution system for purchased power. The location-based calculations use regional 2018 EPA eGRID emission factors.

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)



187,584

Comment

Southern Company's Scope 2 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned facilities. The GHG emissions included in Scope 2 are emissions from electricity purchased for Company consumption at Company-owned locations that are located outside of Southern Company's retail electric service territory and line losses from Southern Company's transmission and distribution system for purchased power. The market-based calculations use a combination of supplier-provided emission factors, where available, and regional 2018 EPA eGRID emission factors.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

1,104,625

Comment

Emissions from purchased goods and services are calculated using the spend-based method, using total dollars spent in each purchase category and EPA's Supply Chain Commodity emission factors.

Scope 3 category 2: Capital goods

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

1,154,647

Comment

Emissions from capital goods are calculated using the spend-based method, using total dollars spent in each purchase category and EPA's Supply Chain Commodity emission factors.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2021



Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

14.022.318

Comment

Includes emissions from purchased electricity that is sold to end users and upstream emissions associated with coal, natural gas, fuel oil, and nuclear fuel purchases. Emissions calculated from the generation of purchased electricity that is sold to end users includes spot and market purchases, power purchase agreements and interchange purchases. Market-based emission factors are applied where available; EPA 2020 eGRID emission factors are applied for spot and market purchases when the generating source is unknown or where market-based emission factors are not available. Upstream emissions associated with coal purchases are calculated using supplier data where available. EPA or WRI emission factors for coal mining and transportation are applied where supplier data are not available. Upstream emissions from natural gas purchases were calculated using emission factors from a NETL paper on natural gas supply chain emissions. Upstream emissions from fuel oil purchases were calculated using dollars spent and EPA supply chain emission factors. Upstream emissions from nuclear fuel were calculated using information from the UN Lifecycle Assessment of Electricity Technologies paper.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

34,907

Comment

Includes upstream transportation and distribution emissions associated with purchased goods calculated using the spend-based method, using total dollars spent and EPA's Supply Chain Commodity emission factors.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

27.994



Comment

Average-data method outlined in the WRI/WBCSD GHG Protocol Technical Guidance for Calculating Scope 3 Emissions was used to calculate emissions for the following waste categories: mixed MSW, mixed paper, mixed metals, mixed recyclables. Emissions factors were sourced from EPA's Emission Factor Hub. Emissions associated with nuclear spent fuel management were calculated using information provided the UN Lifecycle Assessment of Electricity Technologies paper.

Scope 3 category 6: Business travel

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

12,986

Comment

Includes air travel, car travel, and lodging associated with Southern Company's business travel. Emissions were calculated using the spend-based method in which EPA's supply chain emission factors for travel activities were applied to the dollars spent in each travel category.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

27,782

Comment

Emissions from employee commuting were calculated using average employee commuting mileage and average passenger vehicle fuel economy, with EPA emission factors applied. Employee commuting data was collected based on the number of individuals badging into company locations each day of the reporting year.

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2021

Base year end

December 31, 2021



Base year emissions (metric tons CO2e)

17,473

Comment

Includes emissions from leased mobile vehicles and aircraft calculated using EPA emission factors and electricity purchases for leased assets outside of Southern Company's retail electric service territory calculated using the WRI/WBCSD Scope 2 Protocol.

Scope 3 category 9: Downstream transportation and distribution		
Base year start		
Base year end		
Base year emissions (metric tons CO2e)		
Comment		
Scope 3 category 10: Processing of sold products		
Base year start		
Base year end		
Base year emissions (metric tons CO2e)		
Comment		
Scope 3 category 11: Use of sold products		
Base year start		

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

18,442,983

Comment

Includes emissions from the combustion of natural gas sold to customers, calculated using the volume of sold gas delivered to customers and combustion emission factors



from EPA's Greenhouse Gas Reporting Program. Southern Company updated its calculation methodology for RY2021 to account for all Company-owned gas volumes delivered to customers (as reported through Form EIA-176), which aligns with WRI's equity share approach. Southern Company has historically reported its emissions from Subpart NN of EPA's Greenhouse Gas Reporting Program; however, Subpart NN emissions do not account for natural gas sold to high volume customers nor do they account for gas sold through non-owned distribution systems. Additionally, Subpart NN includes emissions from third-party deliveries.

Scope 3 category 12: End of life treatment of sold products Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 13: Downstream leased assets Base year start Base year end Base year emissions (metric tons CO2e) Comment Scope 3 category 14: Franchises Base year start Base year end Base year emissions (metric tons CO2e) Comment



Scope 3 category 15: Investments

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

104

Comment

Includes emissions from Southern Company's investments, using the investmentspecific method.

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006 The Climate Registry: Electric Power Sector (EPS) Protocol



The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Public Sector Standard

The Greenhouse Gas Protocol: Scope 2 Guidance

US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources

US EPA Mandatory Greenhouse Gas Reporting Rule

US EPA Emissions & Generation Resource Integrated Database (eGRID)

Other, please specify

ONE Future Methane Intensity Protocol (2021) is used for Southern Company Gas methane intensity numbers. Gas non-GHGRP methane sources are calculated consistent with the EPA GHGi; 2020 Gas data is used as a proxy where 2021 data is not yet available.

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

82,465,415

Start date

January 1, 2021

End date

December 31, 2021

Comment

Southern Company's Scope 1 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol for all of its owned facilities. The GHG emissions included are Scope 1 direct facility emissions that are required to be tracked by EPA's Greenhouse Gas Reporting Program (GHGRP) and calculated using methods required by the GHGRP. Additional emissions sources for the gas distribution sector are also included consistent with EPA's GHG Inventory and ONE Future; 2020 Gas data is used as a proxy for 2021 data where 2021 data is not yet available. Company owned mobile vehicle emissions, coal pile fugitive methane emissions, and fuel cell emissions are also included in Scope 1.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

75,111,982

Start date



January 1, 2020

End date

December 31, 2020

Comment

Southern Company's Scope 1 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol for all of its owned facilities. The GHG emissions included are Scope 1 direct facility emissions that are required to be tracked by EPA's GHGRP and calculated using methods required by the GHGRP. Additional emissions sources for the gas distribution sector are also included consistent with EPA's GHG Inventory and ONE Future; 2019 Gas data was used as a proxy for 2020 data where 2020 data was not available at the time 2020 was originally reported. Company owned mobile vehicle emissions, coal pile fugitive methane emissions, and fuel cell emissions are also included in Scope 1.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

88,193,823

Start date

January 1, 2019

End date

December 31, 2019

Comment

Southern Company's Scope 1 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol for all of its owned facilities. The GHG emissions included are Scope 1 direct facility emissions that are required to be tracked by EPA's GHGRP and calculated using methods required by the GHGRP. Additional emissions sources for the gas distribution sector are also included consistent with EPA's GHG Inventory and ONE Future. Company owned mobile vehicle emissions are also included in Scope 1.

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

102,602,355

Start date

January 1, 2018

End date

December 31, 2018

Comment

Southern Company's GHG Scope 1 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol for all of its owned facilities. The



GHG emissions included are Scope 1 direct facility emissions that are required to be tracked by EPA's GHGRP and calculated using methods required by the GHGRP. Additional emissions sources for the gas distribution sector are also included consistent with EPA's GHG Inventory and ONE Future.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Southern Company's Scope 2 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned facilities. The GHG emissions included in Scope 2 are emissions from electricity purchases for company use at company-owned locations that are located outside of Southern Company's retail electric service territory, and emissions from line losses on Southern Company's T&D system from power purchased for resale to Southern Company's customers.

The location-based calculations use regional 2020 EPA eGRID emission factors.

The market-based calculations use a combination of supplier-provided emissions factors, where available, 2021 Green-e regional residual mix emission factors for CO2 and 2020 EPA eGRID emission factors for CH4 and N2O.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

174,095

Scope 2, market-based (if applicable)

167,119

Start date

January 1, 2021

End date



December 31, 2021

Comment

Southern Company's Scope 2 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned facilities. The GHG emissions included in Scope 2 are emissions from electricity purchases for company use at company-owned locations that are located outside of Southern Company's retail electric service territory, and emissions from line losses on Southern Company's T&D system from power purchased for resale to Southern Company's customers.

The location-based calculations use regional 2020 EPA eGRID emission factors. The market-based calculations use a combination of supplier-provided emissions factors, where available, 2021 Green-e regional residual mix emission factors for CO2 and 2020 EPA eGRID emission factors for CH4 and N2O.

Past year 1

Scope 2, location-based

204,605

Scope 2, market-based (if applicable)

167,875

Start date

January 1, 2020

End date

December 31, 2020

Comment

Southern Company's Scope 2 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned facilities. The GHG emissions included in Scope 2 are emissions from electricity purchases for company use at company-owned locations that are located outside of Southern Company's retail electric service territory, and emissions from line losses on Southern Company's T&D system from power purchased for resale to Southern Company's customers.

The location-based calculations use regional 2019 EPA eGRID emission factors. The market-based calculations use a combination of supplier-provided emissions factors, where available, and regional 2019 EPA eGRID emission factors.

Past year 2

Scope 2, location-based

207,136

Scope 2, market-based (if applicable)

187,584



Start date

January 1, 2019

End date

December 31, 2019

Comment

Southern Company's Scope 2 emissions are calculated using the equity share approach presented in the WRI/WBCSD GHG Protocol Scope 2 Guidance for its owned facilities. The GHG emissions included in Scope 2 are emissions from electricity purchases for company use at company-owned locations that are located outside of Southern Company's retail electric service territory, and emissions from line losses on Southern Company's T&D system from power purchased for resale to Southern Company's customers.

The location-based calculations use regional 2018 EPA eGRID emission factors. The market-based calculations use a combination of supplier-provided emissions factors, where available, and regional 2018 EPA eGRID emission factors.

Past year 3

Comment

Scope 2, location-based
Scope 2, market-based (if applicable)
Start date
End date

C_{6.4}

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.



Source

Scope 1 de minimis sources

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

Explain why this source is excluded

Per The Climate Registry General Reporting Protocol (TCR GRP) and Electric Power Sector Protocols, there are a number of minuscule sources for the electric utility industry that are not included in our Scope 1 inventory.

Estimated percentage of total Scope 1+2 emissions this excluded source represents

1

Explain how you estimated the percentage of emissions this excluded source represents

The excluded source emissions are insignificant (less than 1%) compared to our total Scope 1+2 inventory.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,104,625

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions from purchased goods and services are calculated using the spend-based method, using total dollars spent in each purchase category and EPA's Supply Chain Commodity emission factors.



Capital goods

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

1.154.647

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions from capital goods are calculated using the spend-based method, using total dollars spent in each purchase category and EPA's Supply Chain Commodity emission factors.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

14,022,318

Emissions calculation methodology

Supplier-specific method Average data method Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

26

Please explain

Includes emissions from purchased electricity that is sold to end users and upstream emissions associated with coal, natural gas, fuel oil, and nuclear fuel purchases. Emissions calculated from the generation of purchased electricity that is sold to end users includes spot and market purchases, power purchase agreements and interchange purchases. Market-based emission factors are applied where available; EPA 2020 eGRID emission factors are applied for spot and market purchases when the generating source is unknown or where market-based emission factors are not available.

Upstream emissions associated with coal purchases are calculated using supplier data where available. EPA or WRI emission factors for coal mining and transportation are applied where supplier data are not available. Upstream emissions from natural gas



purchases were calculated using emission factors from a NETL paper on natural gas supply chain emissions.

Upstream emissions from fuel oil purchases were calculated using dollars spent and EPA supply chain emission factors.

Upstream emissions from nuclear fuel were calculated using information from the UN Lifecycle Assessment of Electricity Technologies paper.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

34,907

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Includes upstream transportation and distribution emissions associated with purchased goods calculated using the spend-based method, using total dollars spent and EPA's Supply Chain Commodity emission factors.

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

27,994

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Average-data method outlined in the WRI/WBCSD GHG Protocol Technical Guidance for Calculating Scope 3 Emissions was used to calculate emissions for the following waste categories: mixed MSW, mixed paper, mixed metals, mixed recyclables. Emissions factors were sourced from EPA's Emission Factor Hub. Emissions associated with nuclear spent fuel management were calculated using information provided the UN Lifecycle Assessment of Electricity Technologies paper.



Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

12,986

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Includes air travel, car travel, and lodging associated with Southern Company's business travel. Emissions were calculated using the spend-based method in which EPA's supply chain emission factors for travel activities were applied to the dollars spent in each travel category.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

27,782

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions from employee commuting were calculated using average employee commuting mileage and average passenger vehicle fuel economy, with EPA emission factors applied. Employee commuting data was collected based on the number of individuals badging into company locations each day of the reporting year.

Upstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

17,473



Emissions calculation methodology

Asset-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Includes emissions from leased mobile vehicles and aircraft calculated using EPA emission factors and electricity purchases for leased assets outside of Southern Company's retail electric service territory calculated using the WRI/WBCSD Scope 2 Protocol.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Scope 1 and Scope 2 emissions have been reported. No material emissions from downstream transportation and distribution.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Electricity is not processed by customers, and emissions from gas distribution are included in Use of Sold Products.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

18,442,983

Emissions calculation methodology

Methodology for direct use phase emissions, please specify Direct use phase emissions from fuels and feedstocks

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Includes emissions from the combustion of natural gas sold to customers, calculated using the volume of sold gas delivered to customers and combustion emission factors



from EPA's Greenhouse Gas Reporting Program. Southern Company updated its calculation methodology for RY2021 to account for all Company-owned gas volumes delivered to customers (as reported through Form EIA-176), which aligns with WRI's equity share approach. Southern Company has historically reported its emissions from Subpart NN of EPA's Greenhouse Gas Reporting Program; however, Subpart NN emissions do not account for natural gas sold to high volume customers nor do they account for gas sold through non-owned distribution systems. Additionally, Subpart NN includes emissions from third-party deliveries.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Electricity and natural gas require no end of life treatment.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

There are no downstream emissions from Southern Company's leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Southern Company does not own any franchises.

Investments

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

104

Emissions calculation methodology

Investment-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Includes emissions from Southern Company's investments, using the investmentspecific method.



Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other relevant upstream emission as compared to Scope 1 emissions.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

There are no downstream emissions resulting from the use of electricity. Gas emissions are provided above.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

4,310,932

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

11,689

Scope 3: Business travel (metric tons CO2e)

4.344

Scope 3: Employee commuting (metric tons CO2e)

28,013



Scope 3: Upstream leased assets (metric tons CO2e) 15.229

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e) 32,244,494

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

RY2020 Fuel and Energy-Related Activities included emissions from power purchased for resale to customers, as well as upstream emissions from coal purchases. For Scope 3 Use of Sold Products, Southern Company updated its calculation methodology for RY2021 to account for all Company-owned gas volumes delivered to customers (as reported through Form EIA-176), which aligns with WRI's equity share approach. Southern Company has historically reported its emissions from Subpart NN of EPA's Greenhouse Gas Reporting Program; however, Subpart NN emissions do not account for natural gas sold to high volume customers nor do they account for gas sold through non-owned distribution systems. Additionally, Subpart NN includes emissions from third-party deliveries.

Past year 2

Start date

January 1, 2019

End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)



Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

3,423,778

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e) 88,879

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e) 35,260,791

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment



RY2019 Fuel and Energy-Related Activities included emissions from power purchased for resale to customers.

For Scope 3 Use of Sold Products, Southern Company updated its calculation methodology for RY2021 to account for all Company-owned gas volumes delivered to customers (as reported through Form EIA-176), which aligns with WRI's equity share approach. Southern Company has historically reported its emissions from Subpart NN of EPA's Greenhouse Gas Reporting Program; however, Subpart NN emissions do not account for natural gas sold to high volume customers nor do they account for gas sold through non-owned distribution systems. Additionally, Subpart NN includes emissions from third-party deliveries.

Past year 3

Start date

January 1, 2018

End date

December 31, 2018

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

2,142,130

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)



37,299,499

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

For the RY2018 CDP Report, Scope 3 Fuel and Energy-Related Activities were incorrectly reported as Scope 2 emissions rather than Scope 3. RY2018 Fuel and Energy-Related Activities included emissions from power purchased for resale to customers.

For Scope 3 Use of Sold Products, Southern Company updated its calculation methodology for RY2021 to account for all Company-owned gas volumes delivered to customers (as reported through Form EIA-176), which aligns with WRI's equity share approach. Southern Company has historically reported its emissions from Subpart NN of EPA's Greenhouse Gas Reporting Program; however, Subpart NN emissions do not account for natural gas sold to high volume customers nor do they account for gas sold through non-owned distribution systems. Additionally, Subpart NN includes emissions from third-party deliveries.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row	7,153	Biogenic carbon emissions associated with
1		landfill gas generation



C₆.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.004

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

82,632,535

Metric denominator

unit total revenue

Metric denominator: Unit total

23,113,000,000

Scope 2 figure used

Market-based

% change from previous year

3

Direction of change

Decreased

Reason for change

Revenue and emissions both increased; however, emissions increased at a lower rate than revenue, resulting in a decrease in intensity. The Southern Company system continues to transition to low-carbon and renewable generation resources.

Intensity figure

0.44

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

82,632,535

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

188,984,403



Scope 2 figure used

Market-based

% change from previous year

5

Direction of change

Increased

Reason for change

Electricity demand in 2020 was reduced by COVID-19 impacts and mild weather. In addition, low natural gas prices in 2020 gave the natural gas generating fleet favorable economics relative to most coal units, displacing additional coal generation. In 2021, GHG emissions increased from the dampened 2020 levels due to increased customer demand combined with increased utilization of the coal generating fleet due to higher natural gas prices.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference	
CO2	80,986,233	Other, please specify Table A-1 to Subpart A of Part 98 - Global Warming Potentials (GWP100yr)	
CH4	1,148,848	Other, please specify	
		Table A-1 to Subpart A of Part 98 - Global Warming Potentials (GWP100yr) GWP CH4: 25	
N2O	241,783	Other, please specify	
		Table A-1 to Subpart A of Part 98 - Global Warming Potentials (GWP100yr) GWP N2O: 298	
SF6	88,551	Other, please specify	
		Table A-1 to Subpart A of Part 98 - Global Warming Potentials (GWP100yr) GWP SF6: 22,800	



C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	640	4	104,551	Fugitive SF6 emissions from Southern Company's transmission and distribution system and fugitive methane emissions from Southern Company's coal piles
Combustion (Electric utilities)	80,354,140	5,757	0	80,738,468	Includes emissions from Southern Company's electric sector (excludes gas sector and mobile emissions)
Combustion (Gas utilities)					Not applicable to electric sector or already included in electric utility combustion
Combustion (Other)					Not applicable to electric sector or already included in electric utility combustion
Emissions not elsewhere classified					Not applicable to electric sector or already included in electric utility combustion

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.



Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	82,465,415

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

By facility

By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Alabama Power Company	34,129,304
Georgia Power Company	22,529,571
Mississippi Power Company	8,276,911
SEGCO	570,910
Southern Power Company	11,497,597
Transmission and Distribution	88,551
PowerSecure	21,004
Southern Company Gas	1,516,414
Leveraged Leases/Southern Company Finance	3,709,801
Mobile Fleet	105,983
Southern Nuclear Company	3,370
Coal Pile Fugitives	16,000

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Barry	6,916,077	31.0069	-88.0103
Gaston	3,571,174	33.2442	-86.4567
Gadsden	8,506	34.0128	-85.9708
Central Alabama	1,736,579	32.69699	-86.73107
Greene Co.	463,928	32.6017	-87.7811
SABIC	309,349	32.3102	-86.5242



Miller	20,141,897	33.6319	-87.0597
Theodore	663,543	30.5248	-88.1289
Washington Co.	479,853	31.2622	-88.0052
SEGCO	570,910	33.2442	-86.4567
Boulevard	26	32.0111	-81.1385
Bowen	9,496,076	34.1256	-84.9192
McDonough	6,596,542	33.8244	-84.475
McIntosh	26,858	32.3558	-81.1683
McIntosh CC	3,265,044	32.3478	-81.1828
McManus	2,548	31.2125	-81.5458
Robins	6,406	32.5806	-83.5831
Scherer	1,896,251	33.0583	-83.8072
Wansley	428,858	33.4124	-85.0345
Yates	810,960	33.4622	-84.8986
Daniel	4,599,704	30.5335	-88.5574
Watson	1,214,583	30.4408	-89.0265
Chevron	785,162	30.34	-88.492
Ratcliffe	1,513,361	32.6538	-88.7574
Sweatt	2,472	32.2925	-88.7461
Addison	161,564	32.911	-84.3059
Cleveland	502,701	35.1706	-81.4161
Dahlberg	129,893	34.0386	-83.3972
Franklin	4,242,122	32.6094	-85.0961
Harris	1,776,116	32.3814	-86.5736
Colonnade	16	33.44046	-86.72758
Rowan	1,753,882	35.7325	-80.6019
Wansley CC	2,883,878	33.4063	-85.0373
Reynold's Landing	10	33.39879	-86.88361
Wilson	3,370	33.12602	-81.75476
Ravenswood	483,313	40.759447	-73.945917
RedHills	3,226,488	33.3825	-89.219444
GT Microgrid	3	33.85578	-84.37977
PowerSecure	21,004	35.952038	-78.515633
Ancona (NIC-ANC)	39,517	41.040833	-88.918333
Troy Grove (NIC-TG)	27,671	41.457778	-89.143611



NICOR GAS (LDC)	301,408	41.812222	-88.2075
Atlanta Gas Light Company (AGLC)	464,741	33.79	-84.39083
Chattanooga Gas Company (CGC)	21,749	35.050556	-85.185
Cherokee LNG (CHK)	19,003	34.268611	-84.361111
Macon LNG (MAC)	18,511	32.905	-83.523055
Virginia Natural Gas (VNG)	88,881	36.855556	-76.3
Central Valley Gas Storage, L.L.C. (CVGS)	6,082	39.389785	- 122.032304
Golden Triangle Storage (GTS)	24,207	30.023062	-94.077152
Riverdale LNG (RVD)	6,851	33.542062	-84.416495
Chattanooga (CHATT)	5,582	35.050556	-85.185
Hudson Storage (NHUD)	10,136	40.593889	-88.946666
Bloomington Storage (NBLM)	5,813	40.686667	-88.919722
Lexington Storage (NLEX)	5,923	40.631111	-88.838611
Pontiac Storage (NPON)	4,979	40.866667	-88.5475
Pecatonica Storage (NPEC)	1,235	42.294209	-89.324395
SNG Station 4020 Bear Creek Storage, LA	8,853	31.736667	-93.062777
SNG Station 4132 Louisville, MS	12,327	33.133889	-89.070277
SNG Station 4140 Reform, AL	8,670	33.366111	-88.018888
SNG Station 4152 Tarrant, AL	27,412	33.600278	-86.772222
SNG Station 4165 DeArmanville, AL	7,364	33.621388	-85.785833
SNG Station 4310 Muldon Storage, MS	20,196	33.753056	-88.668055
SNG Station 5000 Shadyside, LA	6,784	29.736111	-91.416666
SNG Station 5010 White Castle, LA	16,180	30.206389	-91.104722
SNG Station 5110 Toca, LA	7,949	29.867777	-89.839722
SNG Station 5122 Franklinton, LA	10,231	30.817777	-90.186666
SNG Station 5130 Pearl River, MS	1,078	31.316944	-90.045277
SNG Station 5211 Gwinville, MS	27,183	31.740556	-90.055555
SNG Station 5216 Bay Springs, MS	21,552	31.959722	-89.321944
SNG Station 5222 Enterprise, MS	40,563	32.158333	-88.846944
SNG Station 5230 York, AL	10,490	32.326388	-88.193611
SNG Station 5245 Selma, AL	10,267	32.533611	-86.938611
SNG Station 5259 Auburn, AL	16,431	32.523611	-85.473611
SNG Station 5267 Ellerslie, GA	9,359	32.619167	-84.825555
SNG Station 5272 Thomaston, GA	20,484	32.790555	-84.257222



SNG Station 5277 Ocmulgee, GA	15,169	32.937778	-83.721111
SNG Station 5283 Hall Gate, GA	10,045	33.064167	-83.052222
SNG Station 5288 Wrens, GA	9,810	33.192222	-82.366944
Transmission Pipeline Facility, Southern Natural Gas Company, L.L.C.	52,728	29.75788	-95.36739
Albany CS	4,071	31.451667	-84.1425
Bell Mills CS	5,555	33.64025	-85.44957
Bienville CS	8,272	32.304722	-93.057777
Brookman CS	909	31.21127	-81.70052
Duncanville CS	678	33.07819	-87.47206
Elmore CS	4,741	32.521944	-86.326666
Fairburn Compressor Station	2,225	33.55506	-84.5027
Gallion CS	5,679	32.505833	-87.726666
Hilliard Compressor Station	3,309	30.51163	-81.94442
Holy Trinity CS	3,707	32.21026	-85.00087
Lacombe CS	742	30.3686	-89.934
Logansport CS	696	31.98003	-93.94417
McConnells CS	2,364	33.427	-87.71622
Onward MS	7,459	32.71629	-90.94066
Pavo CS	1,578	30.98949	-83.65539
Pell City CS	1,018	33.60188	-86.25405
Pickens CS	5,432	32.87817	-89.97167
Providence CS	1,114	33.43905	-87.30378
Rankin CS	6,609	32.28916	-89.91333
Riceboro CS	5,878	31.75279	-81.51601
Rome CS	1,261	34.255556	-85.353888
Cyberdyne	4	33.40624	-86.91465
Transco Station 116	19,217	33.486389	-84.926111
Red Lion	42,978	39.61197	-75.62636
Brookside	4,464	39.65929	-75.74356
Transmission and Distribution	88,551	33.76433	-84.38825
Mobile Fleet	105,983	33.76433	-84.38825
Coal Pile Fugitives	16,000	33.76433	-84.38825
Renewco Meadow Branch Landfill (RMBL)	458	35.48554	-84.67981



Colonial Brookwood Center	30	33.47061	-86.77107

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Electric Stationary Combustion	80,738,468
Electric Transmission & Distribution	88,551
Gas Transmission & Distribution	1,516,414
Mobile Combustion	105,983
Coal Pile Fugitives	16,000

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	80,843,019	Based on equity share for tracked and reported facilities. Includes Electricity business division only (exclude gas sector and mobile emissions)

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in	Direction	Emissions	Please explain calculation
emissions	of change	value	
(metric tons		(percentage)	
CO2e)			



Change in renewable energy consumption	306,600	Decreased	0.4	Southern Company's gross global Scope 1+2 emissions decreased in 2021 due to increased renewable energy from the addition of solar and wind facilities. In 2021, 306,600 metric tons CO2e were reduced due to increased renewable energy, and our total Scope 1+2 emissions in 2020 were 75,279,857 metric tons CO2e; therefore, we arrived at -0.4% through (-306,600 / 75,279,857) * 100 = -0.4% (i.e., a 0.4% decrease in emissions).
Other emissions reduction activities	0	No change	0	Southern Company generation increased in 2021, primarily due to increased customer demand as compared to 2020 when the COVID-19 pandemic resulted in reduced electricity usage by customers. The Southern Company system continues to transition to low-carbon and renewable generation resources.
Divestment	97,342	Decreased	0.1	Southern Company sold the Ravenswood Generating Station Unit UCC001 on October 29, 2021, resulting in a decrease in emissions compared to the prior year. In 2021, our Scope 1+2 emissions decreased by 97,342 metric tons CO2e due to the sale of the Ravenswood facility. Our total Scope 1+2 emissions from 2020 were 75,279,857 metric tons CO2e. Therefore, we arrived at -0.1% through (-97,342 / 75,279,857) * 100 = -0.1% (i.e., a 0.1% reduction in emissions).
Acquisitions	1,128,512	Increased	1	Southern Company acquired the Central Alabama Generating Station on 9/1/2020, resulting in an increase in emissions for 2021 (full year operation) vs 2020 (partial year operation). In 2021, our Scope 1+2 emissions increased by 1,128,512 metric tons CO2e due to the acquisition of the Central Alabama facility. Our total Scope 1+2 emissions from 2020 were 75,279,857 metric tons CO2e.



				Therefore, we arrived at 1% through (1,128,512 / 75,279,857) * 100 = 1% (i.e., a 1% increase in emissions).
Mergers	0	No change	0	Not applicable.
Change in output	6,391,083	Increased	8	Southern Company generation increased in 2021, primarily due to increased customer demand as compared to 2020 when the COVID-19 pandemic resulted in reduced electricity usage by customers. In 2021, our Scope 1+2 emissions increased by 6,391,083 metric tons CO2e due to increased generation. Our total Scope 1+2 emissions from 2020 were 75,279,857 metric tons CO2e. Therefore, we arrived at 8% through (6,391,083 / 75,279,857) * 100 = 8% (i.e., a 8% increase in emissions).
Change in methodology	0	No change	0	Not applicable.
Change in boundary	0	No change	0	Not applicable.
Change in physical operating conditions	0	No change	0	Not applicable.
Unidentified	0	No change	0	Not applicable.
Other	0	No change	0	Not applicable.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 45% but less than or equal to 50%



C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy- related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non- renewable sources	Total (renewable and non-renewable)
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	180,521	143,590,195	143,770,716
Consumption of purchased or acquired electricity		0	91,333	91,333
Consumption of self- generated non-fuel renewable energy		21,675,696		21,675,696
Total energy consumption		21,856,217	143,681,528	165,537,745

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

Indicate whether your organization undertakes this fuel application



Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Not applicable.

Other biomass

Heating value

HHV

Total fuel MWh consumed by the organization

40,261

MWh fuel consumed for self-generation of electricity

40,261

MWh fuel consumed for self-generation of heat



0

MWh fuel consumed for self-generation of steam

0

Comment

Includes landfill gas.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

140,260

MWh fuel consumed for self-generation of electricity

140.260

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Includes fuel cells.

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

46,270,337

MWh fuel consumed for self-generation of electricity

46,270,337

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Includes all coal and lignite.

Oil

Heating value

HHV



Total fuel MWh consumed by the organization

296.282

MWh fuel consumed for self-generation of electricity

88.306

MWh fuel consumed for self-generation of heat

165.293

MWh fuel consumed for self-generation of steam

42,682

Comment

Not applicable.

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

96,561,918

MWh fuel consumed for self-generation of electricity

93,627,113

MWh fuel consumed for self-generation of heat

69.643

MWh fuel consumed for self-generation of steam

2,865,162

Comment

Not applicable.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

461,659

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

248,784

MWh fuel consumed for self-generation of steam

212,875



Comment

Includes refinery gas, propane, motor gasoline, and jet kerosene.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

143,770,716

MWh fuel consumed for self-generation of electricity

140,166,277

MWh fuel consumed for self-generation of heat

483.720

MWh fuel consumed for self-generation of steam

3,120,719

Comment

Not applicable.

C-EU8.2d

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal - hard

Nameplate capacity (MW)

9,754

Gross electricity generation (GWh)

43,132

Net electricity generation (GWh)

39,646

Absolute scope 1 emissions (metric tons CO2e)

40,910,287

Scope 1 emissions intensity (metric tons CO2e per GWh)

1,032

Comment

Capacity of units is included based on their primary fuel type. Some units may have dual fuel capability. Generation and emissions include facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).



Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Not applicable. Power plant capacity, generation, and related emission data are not provided for lignite fuels because the facilities in our system using lignite are leveraged lease facilities. Southern Company does not sell the electricity from these facilities and therefore does not include them in our calculations for electric sector emission intensities.

Oil

Nameplate capacity (MW)

1,813

Gross electricity generation (GWh)

87

Net electricity generation (GWh)

82

Absolute scope 1 emissions (metric tons CO2e)

39,154

Scope 1 emissions intensity (metric tons CO2e per GWh)

477

Comment

Capacity of units is included based on their primary fuel type. Some units may have dual fuel capability. Generation includes facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).

Gas

Nameplate capacity (MW)

19,991



Gross electricity generation (GWh)

92.376

Net electricity generation (GWh)

90.115

Absolute scope 1 emissions (metric tons CO2e)

36,031,748

Scope 1 emissions intensity (metric tons CO2e per GWh)

400

Comment

Capacity of units is included based on their primary fuel type. Some units may have dual fuel capability. Generation includes facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).

Sustainable biomass

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

O

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Not applicable.

Other biomass

Nameplate capacity (MW)

10

Gross electricity generation (GWh)

40

Net electricity generation (GWh)

40

Absolute scope 1 emissions (metric tons CO2e)

37



Scope 1 emissions intensity (metric tons CO2e per GWh)

1

Comment

Capacity of units is included based on their primary fuel type. Some units may have dual fuel capability. Generation includes facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases). Other biomass includes generation from landfill gas.

Waste (non-biomass)

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Not applicable.

Nuclear

Nameplate capacity (MW)

3,680

Gross electricity generation (GWh)

31,836

Net electricity generation (GWh)

31,124

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Generation and emissions include facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).

Fossil-fuel plants fitted with CCS



```
Nameplate capacity (MW)
   Gross electricity generation (GWh)
   Net electricity generation (GWh)
       0
   Absolute scope 1 emissions (metric tons CO2e)
   Scope 1 emissions intensity (metric tons CO2e per GWh)
   Comment
       Not applicable.
Geothermal
   Nameplate capacity (MW)
   Gross electricity generation (GWh)
   Net electricity generation (GWh)
   Absolute scope 1 emissions (metric tons CO2e)
       0
   Scope 1 emissions intensity (metric tons CO2e per GWh)
       0
   Comment
       Not applicable.
Hydropower
   Nameplate capacity (MW)
       2,758
   Gross electricity generation (GWh)
       6,950
   Net electricity generation (GWh)
       6,896
   Absolute scope 1 emissions (metric tons CO2e)
```



Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Generation and emissions include facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases). Per CDP guidance, excludes pump storage hydro.

Wind

Nameplate capacity (MW)

2,528

Gross electricity generation (GWh)

8,384

Net electricity generation (GWh)

8,384

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The information provided in response to this question reflects Southern Company's total generation based upon financial control only, not upon load service by any retail operating companies. To the extent that there are renewable energy credits or other environmental attributes (collectively "RECs") associated with generation reported, the contracted owner of the RECs (whether a Southern Company affiliate or a third party) maintains all rights and ownership including the right to claim the RECs, utilize the RECs for purposes of associating the environmental benefits of such generation with its electric load or sell such RECs to third parties. Generation and emissions include facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).

Solar

Nameplate capacity (MW)

2,955

Gross electricity generation (GWh)

6,041

Net electricity generation (GWh)

6.041

Absolute scope 1 emissions (metric tons CO2e)

0



Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The information provided in response to this question reflects Southern Company's total generation based upon financial control only, not upon load service by any retail operating companies. To the extent that there are renewable energy credits or other environmental attributes (collectively "RECs") associated with generation reported, the contracted owner of the RECs (whether a Southern Company affiliate or a third party) maintains all rights and ownership including the right to claim the RECs, utilize the RECs for purposes of associating the environmental benefits of such generation with its electric load or sell such RECs to third parties. Generation and emissions include facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).

Marine

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Not applicable.

Other renewable

Nameplate capacity (MW)

17

Gross electricity generation (GWh)

140

Net electricity generation (GWh)

140

Absolute scope 1 emissions (metric tons CO2e)

47,441

Scope 1 emissions intensity (metric tons CO2e per GWh)



338

Comment

Capacity of units is included based on their primary fuel type. Some units may have dual fuel capability. Generation includes facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases). Other renewable includes generation from fuel cells.

Other non-renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Not applicable.

Total

Nameplate capacity (MW)

43,506

Gross electricity generation (GWh)

188,984

Net electricity generation (GWh)

182,469

Absolute scope 1 emissions (metric tons CO2e)

77,028,667

Scope 1 emissions intensity (metric tons CO2e per GWh)

422

Comment

Generation and emissions include facilities for which Southern Company owns and sells the energy to customers (i.e. excludes purchased power and leveraged leases).



C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

United States of America

Consumption of electricity (MWh)

53,691,801

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

53,691,801

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?

Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/Region

United States of America

Voltage level

Transmission (high voltage)

Annual load (GWh)

162,824

Annual energy losses (% of annual load)

2.7

Scope where emissions from energy losses are accounted for

Scope 1

Emissions from energy losses (metric tons CO2e)

0



Length of network (km)

40,480

Number of connections

48

Area covered (km2)

300,438

Comment

Southern Company does not separately calculate emissions from energy losses from its transmission system because these are already accounted for in Southern's total Scope 1 emissions since it generates and transmits the electricity. Additionally, energy losses associated with the electricity purchased to serve our customers are reported under Scope 2 (location-based and market-based).

Country/Region

United States of America

Voltage level

Distribution (low voltage)

Annual load (GWh)

94,646

Annual energy losses (% of annual load)

2.2

Scope where emissions from energy losses are accounted for

Scope 1

Emissions from energy losses (metric tons CO2e)

0

Length of network (km)

255,824

Number of connections

4,384,817

Area covered (km2)

214,823

Comment

Southern Company does not separately calculate emissions from energy losses from its distribution system because these are already accounted for in Southern's total Scope 1 emissions since it generates and distributes the electricity. Additionally, energy losses associated with the electricity purchased to serve our customers are reported under Scope 2 (location-based and market-based).



C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-EU9.5a

(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal - hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

379,220,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

10.5

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years 10.34

Explain your CAPEX calculations, including any assumptions

The CAPEX calculations are based on current and projected capital expenditures.

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions Not applicable.

Oil



CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

4,360,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0.12

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0.14

Explain your CAPEX calculations, including any assumptions

The CAPEX calculations are based on current and projected capital expenditures.

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

648,410,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

17.96

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

18.01

Explain your CAPEX calculations, including any assumptions

The CAPEX calculations are based on current and projected capital expenditures.

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Not applicable.



Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions Not applicable.

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions Not applicable.

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

1,700,590,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

47.1

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years 37.8

Explain your CAPEX calculations, including any assumptions



The CAPEX calculations are based on current and projected capital expenditures.

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptionsNot applicable.

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

164,630,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

4.56

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years 11.83

Explain your CAPEX calculations, including any assumptions Not applicable.

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

626,260,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

17.34

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years 20.23



Explain your CAPEX calculations, including any assumptions

The CAPEX calculations are based on current and projected capital expenditures.

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

54,400,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

1.51

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0.81

Explain your CAPEX calculations, including any assumptions

The CAPEX calculations are based on current and projected capital expenditures.

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

C

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions Not applicable.

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years



0

Explain your CAPEX calculations, including any assumptions Not applicable.

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

32,880,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

 0.9°

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0.84

Explain your CAPEX calculations, including any assumptions

The CAPEX calculations are based on current and projected capital expenditures.

Other non-renewable (e.g. non-renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

C

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions Not applicable.

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and	Description of	CAPEX planned	Percentage of	End of
services	product/service	for	total CAPEX	year
		product/service	planned products	CAPEX
			and services	plan



Distributed generation	Distributed generation such as solar PV	2,000,000	0.13	2026
Home storage systems	Surge protection	3,000,000	0.16	2026
Energy management services	Backup generation projects	177,000,000	9.65	2026
Charging networks	Electric transport initiatives	46,000,000	2.51	2026
Lighting	Outdoor lighting	758,000,000	41.37	2026
Micro-grid	Micro-grid installation	209,000,000	11.38	2026
Large-scale storage	Battery technology	626,000,000	34.18	2026
Other, please specify Surveillance Cameras, Smart Cities, AMI Metering, Colocation	Surveillance Cameras, Smart Cities, AMI Metering, Colocation	11,000,000	0.61	2026

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	For more than five decades, Southern Company's world-class R&D organization has led the U.S. utility industry in the development, funding and demonstration of innovative research necessary to provide clean, safe, reliable, resilient and affordable energy. The organization's diverse research portfolio spans technology development for energy production, delivery and use, with a primary focus on advancing transformational solutions for utility and economy-wide decarbonization – delivering on Southern Company's goal of achieving net-zero greenhouse gas (GHG) emissions by 2050. Our mission is to develop technologies that reduce GHG emissions while delivering maximum value to customers, the business and shareholders in the optimal technology timeline.



C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Carbon capture and storage/utilisation	Pilot demonstration	≤20%	7,100,000	This program supports the research, development, demonstration and deployment of cost-effective carbon capture, utilization and storage (CCUS) technologies. The focal point of these efforts is the National Carbon Capture Center (NCCC), which Southern Company manages and operates for the U.S. Department of Energy (DOE). The facility was created to advance technology development to reduce greenhouse gas emissions from fossil-based power generation. Through pilot testing of more than 70 technologies, the NCCC has reduced the projected cost of carbon capture from fossil-based power generation by more than 40%. In October 2020, the NCCC expanded its scope to evaluate utilization technologies that offer promising ways to transform CO2 into value-added products – partially offsetting CO2 capture costs from power generation and providing an alternative to conventional manufacturing processes. The NCCC's mission further



				evolved to include technology
				solutions for CO2 removal,
				including direct air capture
				(DAC) – which could provide
				complete flexibility in the
				location of value-driven
				atmospheric carbon capture –
				and bioenergy with CCUS.
				Southern Company R&D is
				performing a Front-End
				Engineering Design (FEED)
				study for retrofitting an existing
				Southern Company natural
				gas-fired combined-cycle power
				plant with CO2 capture. Two
				DAC FEED studies are also
				underway: one focused on
				applications to combined heat
				and power and the other
				looking at integration with a
				nuclear power generating
				facility, an existing carbon-free
				energy source. Additional
				projects in Southern
				Company's CCUS program
				include geologic resource
				assessments for commercial
				CO2 storage and fundamental
				science and pilot
				demonstrations to support the
				commercial deployment of CO2
				capture across our service
				territory. The program has
				demonstrated the ability to
				safely store large volumes of
				anthropogenic CO2 in U.S.
				Environmental Protection
				Agency- permitted wells.
Other, please	Applied	≤20%	840,000	This research program focuses
specify	research and			on power delivery technologies
Power Delivery	development			needed for a net-zero grid of
and Grid				the future, including next-
Modernization				generation transmission
				technologies to improve
				reliability, reduce cost and



	ı	T	1	
				modernize the grid; innovative
				substation technology to enable
				more reliable, secure and cost-
				effective design, construction,
				operation and maintenance of
				transmission substations; and
				new distribution grid
				technologies that increase
				safety, reliability and efficiency.
				Projects include deploying a
				sensor suite, tools and devices
				that monitor the condition of
				power delivery assets;
				developing technologies to
				increase transmission and
				distribution situational
				awareness; providing greater
				visualization for grid
				modernization efforts; and
				reducing operations and
				maintenance costs. Examples
				include edge of network grid
				optimization (ENGO), digital
				substation design and
				demonstration, and the Schatz
				Grid Visualization and Analytics
				Center, which serves as a test
				bed for next-generation control
				center technologies. This grid
				operations research is focused
				on supporting transmission
				owners in planning and
				, ,
				operating the bulk power
				system reliably and
				economically to provide safe
				and environmentally
				responsible sources of electric
				power.
Other, please	Applied	≤20%	2,200,000	The energy end-use R&D
specify	research and			program seeks to identify,
End Use	development			harden and advance
Technologies				technologies that address and
				meet industrial, commercial and
				residential customers' evolving
				energy needs. These



technologies promote energy efficiency and efficient electrification and support overall economic development within Southern Company's service territory. Initiatives in this research program include building efficiency, decarbonized transportation, market opportunities for electric alternatives, industrial energy intensity and productivity, advanced space heating and water heating technologies, indoor agriculture evaluations, customer data analytics, and power quality technologies, as well as demand management tools and programs. The energy end-use R&D program seeks to identify, harden and advance technologies that address and meet industrial, commercial and residential customers' evolving energy needs. These technologies promote energy efficiency and efficient electrification and support overall economic development within Southern Company's service territory. Initiatives in this research program include building efficiency, decarbonized transportation, market opportunities for electric alternatives, industrial energy intensity and productivity, advanced space heating and water heating technologies, indoor agriculture evaluations, customer data analytics, and power quality technologies, as well as demand management tools and programs.



Other, please specify Generation Fleet Modernization and Sustainability	Applied research and development	≤20%	1,600,000	This R&D is focused on improving the reliability and efficiency of Southern Company's existing fossil generation fleet, with primary work in areas that include natural gas turbines, cooling systems, advanced materials, instruments and controls, state-of-the-art plant digitalization and environmental controls. Projects work to maximize fleet flexibility, availability and performance; analyze, develop and demonstrate advanced generation concepts with lower carbon footprints for retrofit or greenfield applications; and provide generation technology assessment for system planning. This program also focuses on advancing emerging technologies for wastewater, solid waste and coal combustion residuals. R&D in this area leads to decreased material usage and ensures water and fuel resources are used more efficiently.
Other, please specify Advanced Energy Systems – Next- Generation Nuclear and Alternative Energy Carriers	Applied research and development	≤20%	5,900,000	This program includes a robust initiative to accelerate the commercialization of high-potential, next-generation nuclear technologies on a timescale that addresses climate change benchmarks and supports Southern Company's goal of net-zero greenhouse gas emissions by 2050. Southern Company's primary advanced nuclear R&D project is a collaborative with TerraPower, the U.S. Department of Energy, Electric Power Research Institute and



others, which is focused on development of the Molten Chloride Fast Reactor (MCFR), a specific advanced nuclear technology that offers numerous performance and economic benefits, including flexible, highly efficient clean electric power generation as a complement to the increased use of intermittent renewable resources on the grid. The MCFR technology also has the potential to provide carbon-free high-grade process heat and thermal storage for difficult-todecarbonize industrial markets and ocean transportation sectors. The advanced nuclear program also includes projects aimed at modernizing the licensing framework for advanced reactor technologies, namely the Licensing Modernization Project and **Technology Inclusive Content** of Application Project.

In addition to advanced nuclear, this Southern Company R&D program is exploring alternative energy carriers and includes technology development associated with the production, distribution and end use of clean hydrogen, as well as the opportunity to derive other energy carriers (ammonia, methanol, etc.) from clean hydrogen. This program is particularly developing the technology associated with infrastructure deployment and how the production and use of hydrogen can work in synergy



				with electricity generation and end use to lower the overall greenhouse gas emissions and cost of the energy system. Key projects include the development of hydrogen-based energy storage, hydrogen as a flexible resource for customers, and development of hydrogen distribution infrastructure technology.
Other, please specify Renewables, Storage, and Distributed Generation	Pilot demonstration	≤20%	1,750,000	Southern Company's renewables, storage and distributed generation R&D portfolio represents a collaborative effort between the generation and retail marketing business units of the Southern Company system to develop and advance emerging technologies associated with renewable resources (wind, solar, biomass), energy storage and distributed generation. Objectives include providing technical, economic and operational research to evaluate, develop and demonstrate future technology options for the company and its customers. The comprehensive research portfolio includes advanced "tall tower" wind generation; microgrid and energy storage demonstrations (including renewables coupled with energy storage); as well as research into tools and techniques to optimize solar photovoltaic (PV) generation forecasting and improve operations and maintenance of solar PV facilities.



Other, please specify R&D / Cross- Cutting Technologies	Applied research and development	≤20%	93,000	This program area facilitates enhanced R&D value through internal and external collaboration across strategic areas by leveraging synergies and applying common results to enable technology development. R&D is conducted in this area to advance instrumentation and controls, advanced materials, analytics, sensors and robotic and autonomous systems.
Other, please specify R&D Program / Portfolio Management	Applied research and development	≤20%	570,000	organization has worked for more than five decades to develop new technologies for energy production, delivery and use, and is facilitating the transition to an affordable, reliable net-zero energy system. The organization manages a diverse research portfolio to ensure that Southern Company, its subsidiaries and the energy industry have the capabilities and knowledge to successfully deploy technologies to meet customers' needs while planning for a net-zero future. Current research areas include carbon capture, utilization and storage (CCUS); renewables, energy storage and distributed generation; advanced nuclear, hydrogen-based energy systems, novel power cycles and generating fleet support; and power delivery (electric and gas), as well as emerging programs in energy end use, cyber security and analytics, decarbonized industrial, and sustainability. Southern



				Company's unique, centralized
				Company's unique, centralized R&D organization has a record of developing technology solutions that have successfully improved our business, while also increasing customer value and providing affordable energy. Southern Company R&D actively collaborates with the U.S. government, other utilities, universities, technology developers and other forward-thinking industry organizations, highly leveraging both funding and expertise. By managing public-private partnerships and other forms of external cost-sharing, Southern Company's R&D team magnifies the value of the Company's R&D investment for our customers many times over. Results of the R&D program are routinely applied in decision-making for the deployment of new technologies into the Southern Company system and future portfolio.
Other, please specify Leading Industry R&D Collaborations	Applied research and development	41-60%	28,800,000	Southern Company's model for R&D includes active collaboration with the U.S. government, other utilities, academia and technology developers nationwide and worldwide. Through these longstanding relationships, Southern Company advances the most promising technology options for the energy sector in the transition to a net-zero future. This approach leverages Southern Company's internal research investments through public-private partnerships and other forms of external cost-



sharing. Through membership in organizations like the Electric Power Research Institute (EPRI), Southern Company actively collaborates with the broader electricity sector and its stakeholders to solve significant industry issues. Southern Company is a founding member of EPRI, with hundreds of employees from across the Southern Company system engaged at all levels. including advisory, council, and board positions. Southern Company's ongoing membership in EPRI gains access to the institute's extensive research portfolio. Membership benefits include information exchange and technology transfer leading to better operations, reliability and customer service. In addition to its ongoing EPRI membership activities, Southern Company, with its Southern Company Gas subsidiary, is one of the anchor sponsors that has committed financial support to the Low-Carbon Resources Initiative (LCRI), a five-year research and development collaboration between EPRI, GTI Energy and over 50 other U.S. utilities and industrial companies. The LCRI is focusing on developing a range of decarbonization initiatives using low-carbon generation, low-carbon energy



				carriers like hydrogen, synthetic fuels, and biofuels.
Other, please specify Industry R&D Collaborations	Applied research and development	61-80%	1,900,000	In addition, Southern Company Gas, through Nicor Gas, is a member of two industry-led not-for-profit 501(c)(6) organizations: Utilization Technology Development; and Operation Technology Development Programs. Nicor Gas also partners with Gas Technology Institute (GTI) in the Emerging Technology Program, all of which create collaborations with gas utilities in North America, leading researchers, government agencies, manufacturers and distributors to create and advance new technologies and products to save consumers money, enable efficient fuel choices and minimize environmental impacts, further integrating natural gas with renewable energy. Nicor Gas allocates funding to the Carbon Management Information Center that GTI operates on behalf of the utilities. Employees from Nicor Gas hold GTI board and advisory positions. GTI's R&D impacts and benefits ratepayers, utilities, other stakeholders and our planet. Southern Company Gas is an active member of NYSEARCH, a member-funded organization that focuses on education and training, technology research and development, operations, planning, and increasing public



awareness of natural gas in the
U.S. NYSEARCH's portfolio of
Research, Development &
Deployment projects spans the
entire natural gas value chain
and has specific programs
focused on reducing
greenhouse gas emissions.
Southern Company Gas
regularly invests and engages
in these programs, with a
recent focus on hydrogen
blending and the impacts it may
have on natural gas systems
and commonly used
equipment. organization.
Similar to the GTI, NYSEARCH
collaborates across gas utilities
to develop new products and
technologies for the betterment
of the natural gas industry and
consumers. Southern Company
Gas employees hold board
position and serve as technical
industry leaders within the
organization. Southern
Company Gas also
collaborates with several
national labs and additional
research organizations on an
ad-hoc basis for technical
research projects related to
developing the utility
infrastructure of the future.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place



Scope 3

No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Page/ section reference

Southern 2021 and 2020 Statements of GHG Emissions with Deloitte & Touche LLP Report

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance



Attach the statement

Page/ section reference

Southern 2021 and 2020 Statements of GHG Emissions with Deloitte & Touche LLP Report

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 $\ensuremath{\mathbb{Q}}$ Southern 2021 and 2020 Statements of GHG Emissions with DT Report.pdf

Page/ section reference

Southern 2021 and 2020 Statements of GHG Emissions with Deloitte & Touche LLP Report

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C_{10.2}

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes



C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Other, please specify C6.7a CO2 emissions from biogenic carbon	Attestation standards established by AICPA (AT105)	We engaged Deloitte & Touche LLP to perform a review in accordance with the attestation standards established by the American Institute of Certified Public Accountants (AICPA) of management's assertion that the Statement of Greenhouse Gas Emissions for the years ended December 31, 2021 and December 31, 2020 are presented in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), published by the World Resources Institute/World Business Council for Sustainable Development. C6.7a Emissions from biogenic carbon in this CDP disclosure is included within the Statement of Greenhouse Gas Emissions.
C7. Emissions breakdown	Other, please specify C7.1a Scope 1 emissions by gas	Attestation standards established by AICPA (AT105)	We engaged Deloitte & Touche LLP to perform a review in accordance with the attestation standards established by the American Institute of Certified Public Accountants (AICPA) of management's assertion that the Statement of Greenhouse Gas Emissions for the years ended December 31, 2021 and December 31, 2020 are presented in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), published by the World Resources Institute/World Business Council for Sustainable Development. C7.1a Scope 1 emissions by gas in this CDP disclosure is included within the Statement of Greenhouse Gas Emissions.



C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit origination

Project type

Wind

Project identification

Southern Power Company's Reading Wind Facility originated carbon credits during 2021. The credits were issued to Southern Power Company through the Verra Verified Carbon Standard process and were all transferred to the power purchase agreement offtaker, Royal Caribbean Cruise Lines (RCCL), as part of the RCCL Voluntary Offset program.

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

451,694

Number of credits (metric tonnes CO2e): Risk adjusted volume

451,694

Credits cancelled

Not relevant

Purpose, e.g. compliance

Voluntary Offsetting



C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Navigate GHG regulations

Stakeholder expectations

Change internal behavior

Drive low-carbon investment

Stress test investments

Identify and seize low-carbon opportunities

GHG Scope

Scope 1

Application

Southern Company applies views on future CO2 pressure in its analyses to support resource planning and associated major investment decision-making for current and future generating plants of all its retail electricity businesses.

Actual price(s) used (Currency /metric ton)

50

Variance of price(s) used

The Southern Company regulated electric system considers a range of future pressures on CO2 emissions that evolve over time. In 2021, scenarios with CO2 prices ranging from \$0 to \$50 per metric ton of CO2 emitted were considered, in addition to a view that set an annually decreasing limit on CO2 emissions reaching net zero emissions in 2050. For the scenarios with a carbon price, all prices considered escalate annually at a rate above inflation. Assumptions around CO2 pressure may change from one year to the next due to a variety of factors, including, but not limited to, shifts at the federal policy level.

Type of internal carbon price

Shadow price

Impact & implication

Southern Company uses its views on future CO2 pressure as a tool in resource planning scenario analyses to reveal risks and opportunities. As such, it aids in informing all major generation decisions in our retail electric utilities. The analyses consider the least-cost evolution of the Southern Company generating portfolio. In



different scenarios, different paths for future CO2 pressure are assumed. This pressure is assumed to arise from a future CO2 reduction policy, such as a carbon tax, clean energy standard, cap-and-trade program, or Clean Air Act regulation. Southern Company's integrated resource planning process provides for an understanding of the impacts of resource decisions across a range of scenarios, which provides significant insight to informing and identifying broad industry risks and potential business strategies. These carbon scenarios are utilized in our integrated resource planning processes which are relied upon by the state regulated electric operating companies and their regulators – and ultimately inform major generation retirement and capital investment decisions.

The comprehensive scenario resource planning process has resulted in significant changes to the generation asset portfolio. In 2021, we indicated our intent to retire or repower with natural gas a significant portion of our remaining coal generating fleet. Subject to regulatory approval, we may have only eight coal units remaining by the end of 2028, down from 66 in 2007, with further reductions expected by 2035. In addition, because of the projected energy benefit realized by renewable energy resources, Southern requested regulatory approval to add 6,000 MW of renewables through 2035, and 1,000 MW of company-owned battery storage to help maintain grid reliability throughout the fleet transition by 2030. The Georgia Public Service Commission approved 2,300MW of renewables to be online by 2029 and provisionally approved Georgia Power ownership of the 265 MW McGrau Ford Battery Facility. The Commission further approved procurement of an additional 500 MW of battery energy storage. Lastly, the scenario planning process resulted in the regulatory approval to construct the nation's first new zero carbon U.S. nuclear generation facilities in 30 years.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Climate change performance is featured in supplier awards scheme

% of suppliers by number



29

% total procurement spend (direct and indirect)

23

% of supplier-related Scope 3 emissions as reported in C6.5

(

Rationale for the coverage of your engagement

ONE Future members are a target for engagement as they have all made commitments to reduce methane emissions. ONE Future was formed with a focus to collectively achieve a science-based average rate of methane emissions across facilities equivalent to one percent (or less) of total natural gas production. Each member company has the flexibility to deploy their capital where it will be maximally effective in reducing emissions, such as implementing an innovative technology or retiring an asset. To demonstrate credible and measurable results, ONE Future companies agree to measure their emissions and track their progress over time according to uniform, EPA-approved reporting protocols. Studies have demonstrated the majority of methane emissions come from a small fraction of sources. Therefore, this approach allows companies to focus their resources on identifying and addressing those sources.

To achieve ONE Future's collective one percent target, ONE Future has identified sectoral performance targets for each of the four major industry sectors (Exploration and Production; Gathering and Processing; Transmission and Storage, and Distribution and Retail) that would cumulatively add up to its overall one percent goal. ONE Future has worked to set these performance targets in rough proportion to each industry sectors' respective share of current emissions, considering reduction potentials given current regulatory barriers. These sectoral targets serve both to benchmark company progress toward their goals, but also to facilitate comparisons amongst diverse companies as each strives for optimal performance.

Southern Company Gas is a founding member of ONE Future. With operations across nearly every part of the natural gas value chain, ONE Future members are focused on identifying policy and technical solutions that yield continuous improvement in the management of methane emissions. Southern Company, along with other ONE Future members, is working to increase membership in ONE Future to include additional natural gas suppliers and producers which would increase reductions across the entire value chain. Membership in ONE Future grew from 32 to 52, an increase of 62.5%, between 2020 and 2021. Success of these engagement efforts will be demonstrated as more companies become a part of ONE Future and as member companies reach their methane reduction goals.

Impact of engagement, including measures of success

The Southern Company subsidiaries manage supplier spend separately, and therefore an overall figure for the Southern Company system is unavailable.

Most of our state regulators require natural gas procurement on behalf of our customers



be at reasonable and prudent cost. As such, most of Southern Company's subsidiaries procure natural gas supply, transportation, and storage assets on a best cost basis, subject to operational needs (volume and location). In the event that all else is equal, we consider the environmental efforts of the supplier.

The 29% of suppliers and 23% of total procurement spend is reflective of 2021 spend by the Southern Company electric operations with companies that are either members of ONE Future or part of companies that are engaged in ONE Future. In some cases, an affiliate company is the participating member, and the supplier itself is not a named member of ONE Future.

For Southern Company Gas, the amount of total 2021 procurement spend with companies that are either members of ONE Future or part of companies that are engaged in ONE Future is 20%. In some cases, an affiliate company is the participating member, and the supplier itself is not a named member of ONE Future. This procurement spend calculation includes Southern Company Gas' (direct and indirect, but excluding procurement by its subsidiary SouthStar Energy Services LLC) spend on natural gas commodity, transportation and storage.

The percentage of total 2021 procurement spend of SouthStar Energy Services LLC (direct and indirect) on natural gas commodity, transportation and storage with companies that are either members of ONE Future or part of companies that are engaged in ONE Future is 34%. In some cases, an affiliate company is the participating member, and the supplier itself is not a named member of ONE Future.

Comment

Not applicable.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement



Energy efficiency programs and products are made available to all customers served by each of the electric operating companies. There are specific programs and products targeted at residential and commercial customers to increase the efficiencies of their homes and businesses and ultimately decrease energy usage. Programs include appliance incentives for upgrading to new more efficient models, home energy assessments, Home Energy Improvement Programs and behavior analysis programs focused on reducing energy usage. Southern Company Gas natural gas energy efficiency programs offer certain of its LDC customers a wide array of energy-saving products, assessments and incentives. These programs are designed and implemented to help customers conserve energy and save money, without sacrificing comfort, style or convenience.

Impact of engagement, including measures of success

The programs are all facilitated by individual retail operating companies, and success is measured in various ways for each program including but not limited to tracking of rebates for appliance installations and tracking participation in auditing and behavioral programs. In 2021, Mississippi Power launched a demand response pilot in partnership with Energy Impact Partners and Uplight to help achieve an equitable energy transition. The Smart Thermostat Access Rewards (STAR) pilot includes up to 200 residential single-family home participants within low-income qualified communities. Each enrolled customer receives a free internet-connected thermostat and professional installation. Utilizing Uplight's demand response event dispatch and reporting system, enrolled customers participate in up to ten automated demand response events during the summer and winter. Participants are compensated for their involvement in the pilot.

The most telling measure of success is the reduction in electricity usage of 3 billion kWh of energy from our electric utilities. Additionally, since 2011, Southern Company Gas's subsidiary, Nicor Gas, has successfully implemented the Nicor Gas Energy Efficiency Program. The Program has helped Nicor Gas customers save more than 197 million net therms.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

Southern Company electric operating companies each have programs and services available to all customers related to renewable generation including but not limited to



programs such as Community Solar and Simple Solar programs offered by Georgia Power. Due to multiple program offerings, Georgia Power, for example, offers solar education and analysis to assist all customers in determining which solar option is best for them. Alabama Power also has implemented renewable energy programs to provide solar energy to customers who want to drive development of new resources without requiring subsidies from other customers. Alabama Power's residents and businesses have the opportunity to purchase renewable energy credits through the Greener State Program.

Impact of engagement, including measures of success

The programs are all facilitated by individual retail operating companies, and success is measured in various ways for each program. For example, since 2017, over 45,000,000 kilowatt hours of clean energy have been used by participants through Alabama Power's Greener State Program. This is approximately a 71% increase from last year's usage. Another measure of success is the increased enrollment in such customer engagement programs. For example, Georgia Power's Simple Solar program has seen a significant increase in interest and growth of 176% in kWh sold in 2021, driven by 10 new Large Volume participants.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

1

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

Customers are engaging consultants to support their sustainability and decarbonization plans and looking for more data to support the effort. Southern Company is exploring how the utility can make data access and analytics accessible and usable and determining if it is a service that should be available to all or an unregulated business offering.

In order to inform the approach, a small set of representative customers is being selected to evaluate the solutions viability and impact. We are offering customers deeper analyses around energy use, costs and current state emissions to inform decarbonization strategies. We also provide energy efficiency recommendations, distributed energy resource solutions, and resiliency and electrification options across the customers' buildings.

Southern Company's New Ventures Group is the Founding Partner and Chair of the \$2+



Billion utility-backed venture capital fund, Energy Impact Partners (EIP). We are working with EIP Frontier Fund companies that targets early-stage technologies helping accelerate the transition to net-zero greenhouse gas emissions. The Frontier Fund is built on two principles; the new wave of interest from investors to help solve the world's challenges in decarbonization, and the increasing demand for zero-carbon energy, products and goods. While we do not have any current customer examples focusing on the data analytics of decarbonization projects, we are in early stages of discussions around these technologies that are on our immediate horizon.

Impact of engagement, including measures of success

The program will be measured through engagement metrics – marketing conversion rates and inbound requests as well as adoption and implementation per customer and per recommendation. The expectation is that energy efficiency, electrification and distributed resource solutions are implemented at engaged customers facilities reducing carbon and increasing reliability. Each customer's implementation will be measured in kWh saved, carbon emission reduction and in cost savings. Total program impact will be tracked across the Southern Company system.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

3.9

% of customer - related Scope 3 emissions as reported in C6.5

n

Please explain the rationale for selecting this group of customers and scope of engagement

SouthStar Energy Services (SSE), which does business in Georgia as Georgia Natural Gas® (GNG), in Ohio as Ohio Natural Gas® (ONG), and in Michigan as Grand Rapids Energy® (GRE) utilizes a variety of methods and channels to educate consumers about its Greener Life® program and the benefits of customer participation. For example, GNG representatives provide information about Greener Life to customers who call GNG to enroll or change price plans. GNG also employs television commercials, billboards, references in printed customer materials, community engagement videos on local news stations and an informative video which can be sent to customers who request additional information from our call center agents. And GNG's website (GNG.com/greenerlife) is always available to provide an interactive, informative experience for customers interested in learning more detailed information about carbon offsets and the Greener Life program at their convenience. GNG provides a free trial period for new Greener Life customers, either six of 12 months free, to encourage customer participation.



The Greener Life program provides customers with the option to offset their individual GHG emissions and make their natural gas usage carbon neutral. The program is available to SSE's Georgia (Georgia Natural Gas), Michigan (Grand Rapids Energy®), and Ohio (Ohio Natural Gas®) customers, and to our Commercial and Industrial customers through our Greener Life for Business program. These segments were selected based on expected market demand and ability to offer the program based on market limitations. The scope of engagement includes voluntary enrollment and an associated monthly or per-therm fee. Once enrolled, a customer's GHG emissions are calculated and SSE purchases and retires carbon offsets to balance the impact of those emissions. The Greener Life program does not include lifecycle emissions that occur during extraction, production, or delivery.

Impact of engagement, including measures of success

The primary measure of success for this program is customer enrollments / participation. As of June 2, 2022, the Greener Life program had over 18,000 active customers. These customers have offset an estimated 108,112,507 lbs. of CO2e. Since the program's inception, the GNG Greener Life and Greener Life for Business programs have received Green-e Climate certification from an independent third party, the Center for Resource Solutions. Green-e Climate is the leading certification program for voluntary carbon offset programs.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)



Southern Company's Transition to Net Zero (June 16, 2021) https://s27.q4cdn.com/273397814/files/doc_downloads/esg/20210616-Policy-Positions-2021.pdf

SO 20210616_PolicyPositions2021.pdf

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

Southern Company's constructive engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. We believe it is important to our business success and to meeting our business goals, including decarbonization, to communicate with policymakers about, and advocate for, the interests of our company, customers, employees, stakeholders and the communities that we serve. As part of our efforts, we engage directly and indirectly with lawmakers and regulators on a variety of issues, including climate-related issues.

Southern Company continually monitors policy positions of associations of which it is a member. Members of the Southern Company Management Council meet at least quarterly to review the public statements and positions of associations, assessing, among other things, whether the group is aligned with the Company's net zero goal. When a group is significantly misaligned with the policy positions that Southern Company supports for a net zero transition, we evaluate and determine whether to continue our membership.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate Subsidies for renewable energy projects

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Southern Company engages directly with policymakers on several issues related to climate change, including energy efficiency, electric transportation, and clean energy generation incentives (for example, clean energy standard or clean energy payment program, RDD&D, clean energy tax incentives, infrastructure, and regulation of methane emissions), all of which Southern Company conceptually supports.

Policy, law, or regulation geographic coverage National

Country/region the policy, law, or regulation applies to United States of America



Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Southern Company engages with policymakers to help shape an energy policy that supports developing and deploying more low- and carbon-free energy resources while ensuring that each state that we serve retains the ability to adequately plan and deploy resources that meet the needs of its citizens and communities. This constructive engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. We believe it is important to our business success and to meeting our business goals, including decarbonization, to communicate with policymakers about, and advocate for, the interests of our company, customers, employees, stakeholders and the communities that we serve. As part of our efforts, we engage directly and indirectly with lawmakers and regulators on a variety of issues, including climate-related issues. Southern Company supports regulatory action that achieves GHG emission reductions from the electric sector and that is durable and consistent with EPA's authority under the Clean Air Act and other federal laws.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Elements of the policy or legislation could have potentially had negative impacts to customers, including cost impacts. Any proposed alternative would have needed to reduce impact to customer costs.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Methane emissions

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Southern Company engages directly with policymakers on several issues related to climate change, including energy efficiency, electric transportation, and clean energy generation incentives (for example, clean energy standard or clean energy payment program, RDD&D, clean energy tax incentives, infrastructure, and regulation of methane emissions), all of which Southern Company conceptually supports.

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation



Support with minor exceptions

Description of engagement with policy makers

Southern Company engages with policymakers to help shape an energy policy that supports developing and deploying more low- and carbon-free energy resources while ensuring that each state that we serve retains the ability to adequately plan and deploy resources that meet the needs of its citizens and communities. This constructive engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. We believe it is important to our business success and to meeting our business goals, including decarbonization, to communicate with policymakers about, and advocate for, the interests of our company, customers, employees, stakeholders and the communities that we serve. As part of our efforts, we engage directly and indirectly with lawmakers and regulators on a variety of issues, including climate-related issues. Southern Company supports regulatory action that achieves GHG emission reductions from the electric sector and that is durable and consistent with EPA's authority under the Clean Air Act and other federal laws.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Elements of the policy or legislation could have potentially had negative impacts to customers, including cost impacts. Any proposed alternative would have needed to reduce impact to customer costs.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify

Clean energy generation (Clean Energy Standard, Clean Energy Payment Program, Infrastructure, RDD&D)

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Southern Company engages directly with policymakers on several issues related to climate change, including energy efficiency, electric transportation, and clean energy generation incentives (for example, clean energy standard or clean energy payment program, RDD&D, clean energy tax incentives, infrastructure, and regulation of methane emissions), all of which Southern Company conceptually supports.

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation



Support with minor exceptions

Description of engagement with policy makers

Southern Company engages with policymakers to help shape an energy policy that supports developing and deploying more low- and carbon-free energy resources while ensuring that each state that we serve retains the ability to adequately plan and deploy resources that meet the needs of its citizens and communities. This constructive engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. We believe it is important to our business success and to meeting our business goals, including decarbonization, to communicate with policymakers about, and advocate for, the interests of our company, customers, employees, stakeholders and the communities that we serve. As part of our efforts, we engage directly and indirectly with lawmakers and regulators on a variety of issues, including climate-related issues. Southern Company supports regulatory action that achieves GHG emission reductions from the electric sector and that is durable and consistent with EPA's authority under the Clean Air Act and other federal laws.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Elements of the policy or legislation could have potentially had negative impacts to customers, including cost impacts. Any proposed alternative would have needed to reduce impact to customer costs.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify
Alliance for Transportation Electrification

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position



State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The Alliance for Transportation Electrification advocates the acceleration of transportation electrification nationwide.

"In summary, broad collaboration and multiple partnerships are essential to leverage utility investments to reach ambitious decarbonization and clean transportation goals."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

American Biogas Council

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The American Biogas Council is the only national trade association representing the entire U.S. biogas industry. Represent over 260 companies dedicated to maximizing the



production and use of biogas from organic waste.

"Biogas systems protect our air, water, and soil by recycling organic waste into renewable energy and soil products, while reducing GHG emissions. ...we can prevent tons of carbon emissions from entering our air, prevent nutrients from entering our waterways, create healthier soils with natural, non-fossil fuel-based fertilizers, and produce reliable, baseload renewable energy."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

American Clean Power Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"The ACP works to champion policies that will transform the U.S. power grid to a low-cost, reliable and renewable power system. Its goal is to make renewables the dominant energy source in the United States." (Energy Storage Association merged with ACP on



Jan. 1 2022)

"The 2021 priorities are laid out in the following four areas, which taken together form a comprehensive program – FOUR PILLARS – that the Federal government can take without delay to achieve long-term clean energy and carbon goals.

- (1) Clean Energy Targets/Carbon Policies
- (2) Expanding Interstate Transmission
- (3) Expediting Federal Permitting
- (4) Removing Competitive Barriers"

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

American Coal Ash Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)



Devoted to recycling the materials created when coal is burned to generate electricity .

"For each ton of fly ash used in place of traditional cement a reduction of slightly less than one ton of carbon dioxide is achieved. To put this in perspective, one ton of carbon dioxide is equivalent to about two months' emissions from an automobile. Estimating based upon the amount of fly ash used annually in concrete, approximately 13 millions tons of carbon dioxide is prevented from entering the earth's atmosphere."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

American Gas Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"AGA's mission is to serve as the indispensable, leading voice and facilitator on its members' behalf in promoting the safe, reliable, and efficient delivery of natural gas to homes and businesses across the nation. AGA advocates for government rules and



policies that protect the environment while allowing its natural gas utility members to continue to deliver clean, affordable natural gas to customers, safely and reliably."

"The American Gas Association is committed to reducing greenhouse gas emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Business Roundtable

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Business Roundtable is an association of chief executive officers of America's leading companies working to promote a thriving U.S. economy and expanded opportunity for all Americans through sound public policy."



"Business Roundtable believes corporations should lead by example, support sound public policies and drive the innovation needed to address climate change. To this end, the United States should adopt a more comprehensive, coordinated and market-based approach to reduce emissions. This approach must be pursued in a manner that ensures environmental effectiveness while fostering innovation, maintaining U.S. competitiveness, maximizing compliance flexibility, and minimizing costs to business and society.... Business Roundtable believes that to avoid the worst impacts of climate change, the world must work together to limit global temperature rise this century to well below 2 degrees Celsius above preindustrial levels, consistent with the Paris Agreement."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Carbon Utilization Research Council

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)



CURC is an industry coalition focused on technology solutions for the responsible use of our fossil energy resources in a balanced, low-carbon electricity generation portfolio.

"International authorities recognize that fossil fuels will continue to be used both here in the U.S. and globally. It is how we manage the carbon dioxide produced from the use of fossil fuels that will determine whether we are able to cost-effectively achieve midcentury emissions reductions necessary to keep the effects of climate change to a minimum. To meet these important objectives, members of CURC are at the forefront of their industries and partnering with the Department of Energy (DOE) to develop and commercialize technologies that will transform the way the world uses our energy resources and simultaneously achieve global climate targets."

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify Class of '85

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position



State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Group of approximately 40 electric generating companies with diverse generation assets located throughout the country that participates in regulatory and policy developments related to the Clean Air Act that affect the power sector.

No stated climate policy position. Member-driven organization. Based on overall meeting discussions and recent comment exercises, the overall membership is generally aligned with high-level goals to facilitate an efficient, equitable clean energy transition to mitigate effects of climate change. However, it is possible that some positions advocated in some limited rulemaking or litigation contexts could be interpreted to include some aspects not in full alignment with all components of the Paris Agreement with regard to timing, underlying assumptions, etc. In these potential instances of misalignment, Southern has the ability to abstain from signing on in support of the affected document so that our participation maintains consistency with Southern's climate policy.

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Coalition for Renewable Natural Gas

Is your organization's position on climate change consistent with theirs?

Consistent



Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Advocates for sustainable development, deployment and utilization of renewable natural gas so that present and future generations will have access to domestic, renewable, clean fuel and energy.

"RNG Coalition is...dedicated to the sustainable advancement of [RNG] as a clean, green, alternative and domestic energy resource - and as a key component and partial solution to addressing global climate change."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Cross-Cutting Issues Group

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position



State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Group of approximately 20 electric generating companies with diverse generation assets located throughout the country that participates in regulatory and policy developments related to waste, water, and wildlife programs that affect the power sector.

No stated climate policy position. Member-driven organization. Based on overall meeting discussions and recent comment exercises, the overall membership is generally aligned with high-level goals to facilitate an efficient, equitable clean energy transition to mitigate effects of climate change. However, it is possible that some positions advocated in some limited rulemaking or litigation contexts could be interpreted to include some aspects not in full alignment with all components of the Paris Agreement with regard to timing, underlying assumptions, etc. In these potential instances of misalignment, Southern has the ability to abstain from signing on in support of the affected document so that our participation maintains consistency with Southern's climate policy.

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Edison Electric Institute (EII)

Is your organization's position on climate change consistent with theirs?

Consistent



Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Trade association that represents all U.S. investor-owned utilities. Organized in 1933, EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums. EEI's member companies are among the most regulated companies in the country, and EEI engages on their behalf with federal and state legislators, regulators, and other policymakers through lobbying, advocacy, and regulatory proceedings, with the goal of providing customers affordable, reliable, and resilient clean energy.

In addition to the detailed disclosures required by federal law, EEI voluntarily produces an annual Lobbying, Advocacy, and Other Expenditures report that outlines our funding and activities and is responsive to the information needs of our member companies and their regulators.

Going forward, electric companies will continue to make significant carbon reductions. To meet long-term clean energy and climate goals, we need policies that:

- Significantly increase research, development, demonstration, and deployment funding for the range of clean energy technologies.
- Provide federal support to get these technologies from R&D to commercialization at an affordable cost.
- Revamp existing energy tax credits to advance newer technologies.
- Create a new technology-neutral tax credit.
- Enable the siting, permitting, and construction of new technologies.
- Enhance energy grid modernization and resilience.
- Leverage electric power sector emission reductions to reduce emissions in other sectors of the economy."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)



Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Electric Drive Transportation Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Electric Drive Transportation Association, through policy advocacy, works to advance electrification and the economic growth, energy security and environmental sustainability it provides. EDTA focuses on investing in energy and economic security with a consistent policy environment for electric vehicles and infrastructure."

"The [EDTA], the collective voice of the entire EV value chain, believes that:

- Achieving net-zero emissions transportation for all Americans is a critically important goal that requires a comprehensive effort across multiple sectors of the economy to electrify transportation.
- U.S. leadership in this effort to electrify transportation will secure our economic future while driving innovation that reduces emissions, creates jobs and boosts investment opportunities in our communities and across all segments of the economy.
- To secure our leadership, the U.S. should implement an aggressive five-year plan that catalyzes growth with significant, long-term investments in market expansion and accelerates technology development and deployment for cross-sector adoption of emobility."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net



zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Electric Utility Industry Sustainable Supply Chain Alliance

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

EUISSCA is a group of energy utilities and is focused on best practice sharing for the creation of sustainable electric supply chains. Alliance's goal is to work with industry suppliers and other interested parties to improve environmental performance and advance sustainable business.

Although sustainability goals are closely linked to and generally consistent with climate change mitigation goals, the EUISSCA has not published any direct climate policy statements on its web site.

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify Energy Forward

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"EnergyForward is a group of power-generating companies serving millions of customers nationwide and brought together by a shared interest in the clean energy transition.

The group works to improve understanding of policies that advance:

- · clean-energy infrastructure and technological development;
- · just transitions for workers and communities;
- · a focus on meeting consumer demand and electric reliability; and
- better understanding of the regulatory landscape in which members operate."

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Energy Solutions Center Inc.

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Energy Solutions Center, Inc. (ESC) is a non-profit organization of energy utilities and equipment manufacturers that promotes energy efficient natural gas solutions and systems for use by residential, commercial, and industrial energy users. The Center creates educational and marketing materials, case studies, training manuals, decision analysis software, and other tools and resources designed to enhance the success of those utility customer service professionals responsible for enhancing customer productivity, efficiency, reliability and comfort.

"The Low Carbon Strategies Workgroup (LCSW), an information exchange vehicle, will help ESC members stay abreast of regulatory, business, and technological issues. This workgroup will address the move to drastically reduce fossil fuel energy consumption and will provide valuable information to natural gas utilities as they contemplate how best to operate in a low carbon environment. This workgroup will focus on an array of low carbon strategies such as:

- · Zero Net Energy Strategies for Residential and Commercial Customers
- Renewable Natural Gas
- Power to Gas
- Carbon Capture Technologies / Carbon Sequestration"

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions



and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Energy and Wildlife Action Coalition

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"The Coalition is dedicated to assisting members in the management of natural resources issues associated with the development, generation, transmission, or sale of electricity. "

"...EWAC advocates for federal environmental policies and regulations that protect wildlife and related natural resources while ensuring that the electric power industry can deliver the safe, reliable, affordable, and increasingly clean energy their customers need.... Member companies are decreasing use of fossil fuels and increasing renewable energy while implementing sustainable business practices that integrate environmental, social, and economic objectives and concerns."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions



and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Energy Systems Integration Group Inc.

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Collaborative and coordinating group that addresses the technical challenges associated with integrating multiple energy systems to enable clean, reliable, and affordable energy systems worldwide."

"ESIG addresses the technical challenges associated with integrating multiple energy systems to enable clean, reliable, and affordable energy systems worldwide. Without the energy systems integration perspective, the full potential of renewable energy will never be reached....the Global Power System Transformation (G-PST) Consortium, a bold and innovative public-private partnership to accelerate transitions to net-zero-emissions power systems and drive broader economic growth."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions



and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify Hydrogen Council

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Hydrogen Council is a global CEO-led initiative that brings together leading companies with a united vision of and long-term ambition for hydrogen to foster the clean energy transition."

No climate policy statement is included on the web site. However, the underlying premise of the Hydrogen Council business' value proposition is tied to mitigation of climate change through decarbonization of global economic activity. A large percentage of this decarbonization is expected to be accomplished through increased use of hydrogen across the global economy. "To mitigate the effects of climate change, we will need to transition to an energy system with fewer greenhouse gas emissions and more sustainable energy production and consumption. A long-term structural change in energy systems is needed, and Hydrogen Council members are developing hydrogen solutions to accelerate this energy transition."



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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Interstate Natural Gas Association of America

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

INGAA is a trade organization that advocates regulatory and legislative positions of importance to the natural gas pipeline industry in North America. INGAA is comprised of 27 members, representing the vast majority of the interstate natural gas transmission pipeline companies in the U.S. and Canada.

"As America's energy leaders, INGAA's members recognize the need to build upon our efforts and to continue to act to address global climate change by advancing our commitment to minimize and reduce [GHG] emissions, including methane emissions. INGAA members are determined to lead the effort to modernize our nation's interstate natural gas delivery network infrastructure with a goal of reducing emissions and helping



minimize the impact on our climate. Our commitments will include an active effort to do even more to address climate change by supporting renewables, as well as new and innovative technologies and process enhancements that will further reduce emissions. Working together, we are determined to support sound public policies that protect the environment while ensuring a safe, reliable and resilient energy transmission system that provides the affordable energy so many of our businesses and families need."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

National Association of Manufacturers

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Representing small and large manufacturers in every industrial sector and in all 50 states – advocates for free enterprise, competitiveness, individual liberty and equal opportunity.

"The NAM and our member companies are committed to addressing global climate



change while preserving competitiveness.... Policymakers should focus on enabling the technological breakthroughs that are needed to significantly reduce emissions and should incentivize increasing the use of products and processes that are the most costeffective and carbon-efficient. Government should not impede or impair the ability of energy-producing and energy-consuming segments of industry from obtaining adequate funding for energy-related investments. The NAM supports policies that strengthen the competitiveness of U.S. manufacturers and opposes policies that weaken the competitiveness of U.S. manufacturers. Incentives are often effective policy tools, but should not artificially create winners and losers in a quest for developing competing technologies or fuels. In establishing federal clean energy policies, the NAM encourages Congress to provide transparent assessments of costs and benefits, prioritize energy reliability, recognize regional differences in renewable energy resource availability, and harmonize policies so that state and federal regulations made duplicative or unnecessary are eliminated. Research and development efforts should be pursued as a means to enhance energy flexibility and expand diversification of energy supplies over time to increase the competitiveness of U.S. manufacturers."

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
National Hydropower Association

Is your organization's position on climate change consistent with theirs?

Consistent



Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Nonprofit association dedicated exclusively to promoting the growth of clean, renewable hydropower and marine energy. Membership comprised of both public and investor-owned utilities, independent power producers, developers, equipment providers & manufacturers, service providers, environmental and engineering consultants, cities, attorneys, and public policy, outreach, and education professionals. Policy objectives include Advocating for policies that set national clean energy targets which include fair and equitable advancements for waterpower. Mission: Champion waterpower as America's premier carbon-free renewable energy resource."

"The nation needs to rely on a diverse and domestic energy mix to generate safe, reliable, and affordable electricity to meet its clean energy targets. Over the past decade, our nation's energy mix has changed dramatically with much of our electricity coming from clean, carbon-free sources, including hydropower which produces low-carbon electricity, storage, scale and flexibility....As an association, we believe that hydropower, in all its forms, is integral to a reliable, resilient grid and is an essential part of a climate solution."

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned



Trade association

Other, please specify

National Coal Transportation Association

Is your organization's position on climate change consistent with theirs?

Unknown

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"NCTA's mission is to provide education and facilitation for the resolution of coal transportation issues in order the serve the needs of the general public, industry and all modes of transportation."

No climate policy statement on web site. Continuing to fuel the continually shrinking fleet of coal plants is a necessary element of the ongoing orderly fleet transition to net zero. Organization structured in 4 committees focused largely on technical, operational concerns seeking cost efficiency:

- Operations and Maintenance
- Eastern Logistics and Planning
- Western Logistics and Planning
- · Education (oversees scholarship awards)"

"The National Coal Transportation Association (NCTA) is a tax-exempt, non-profit corporation comprising electric utilities; coal producers; shippers of coal-related commodities (e.g., limestone and coal combustion products); and entities that produce, repair, and manage all facets of railcar component parts and systems, as well as services for railcar operations. Its primary purpose is to promote the exchange of ideas, knowledge, and technology associated with the transportation and beneficial uses of coal."

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Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
National Petroleum Council

Is your organization's position on climate change consistent with theirs?

Unknown

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The purpose of the NPC is solely to advise, inform, and make recommendations to the Secretary of Energy with respect to any matter relating to oil and natural gas or to the oil and gas industries submitted to it or approved by the Secretary. The NPC does not concern itself with trade practices, nor does it engage in any of the usual trade association activities.

"Addressing climate change and creating greater regulatory certainty is critical to ensure cost-effective and reliable energy supplies for consumers."

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Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Natural Gas Vehicles for America

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Mission: to create a profitable, sustainable and growing market for compressed natural gas and liquefied natural gas-powered vehicles.

NGVAmerica believes:

- Climate change is real.
- Immediate investment is needed to clean and decarbonize all transportation sectors.
- Public policy should act immediately to deploy vehicles that meet strict emissions standards and achieve a net zero greenhouse gas emissions (GHG) endpoint rather than advancing technology-specific mandates or waiting for future product commercialization and availability."

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Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

North American Energy Markets Association

Is your organization's position on climate change consistent with theirs?

Unknown

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

NAEMA is an independent, non-profit trade association representing entities involved in the buying and selling (marketing) of energy or in providing services to the energy industry. Members work together to promote an informed, efficient and open energy marketplace throughout North America.

No climate policy statements included on web site. Focus of organization is on business practices and markets, with emphasis on contracts and financials.

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Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Nuclear Energy Institute

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"NEI's mission is to promote the use and growth of nuclear energy through efficient operations and effective policy. NEI accomplishes this by providing a unified industry voice before Congress, the executive branch, state and local legislatures, and federal regulators, as well as international organizations and venues, on key policy issues."

"Nuclear power reactors are the ideal carbon-free, 24/7/365 partner to wind turbines, solar panels and energy storage in meeting the President's goal to decarbonize our electricity system by 2035."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

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Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?



Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Our Nation's Energy Future Coalition Inc.

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

ONE Future was formed with a focus to collectively achieve a science-based average rate of methane emissions across our facilities equivalent to one percent (or less) of total natural gas production. With operations across every part of the natural gas value chain, we are focused on identifying policy and technical solutions that yield continuous improvement in the management of methane emissions.

"We are a unique coalition of leading companies who recognize that excessive methane emissions can potentially erode the benefits of natural gas relative to other fossil fuels and therefore prudent development and operations are vital to ensuring the industry can support the energy needs of the nation and the world in a sustainable manner, even in a low carbon economy. With operations across every part of the natural gas value chain, we are focused on identifying policy and technical solutions that yield continuous improvement in the management of methane emissions associated with the production, processing, transmission and distribution of natural gas."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Power for Tomorrow

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

PFT is a platform that supports the electric regulated utility model. PFT believes that the regulated utility model offers benefits to consumers and the environment as the nation transitions to a cleaner energy future. PFT supports renewable energy production and believes that the fastest way to deploy renewables is through state regulation of the traditional vertically integrated electric system."

"PFT supports renewable energy production and believes that the fastest way to deploy renewables is through state regulation of the traditional vertically integrated electric system. PFT is not organized to advocate for or against specific resources, but investorowned electric companies are leaders in clean energy development across the nation and have reduced carbon emissions 45 percent below 2005 levels, compared to the industry as a whole (including state and city-owned utilities) that have decreased emissions by only 33 percent."

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Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Renewable Thermal Collaborative

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"RTC is the global coalition for companies, institutions, and governments committed to scaling up renewable heating and cooling at their facilities, dramatically cutting carbon emissions. RTC members recognize the growing demand and necessity for renewable heating and cooling and the urgent need to meet this demand in a manner that delivers sustainable, cost-competitive options at scale."

"The Renewable Thermal Collaborative supports policies to accelerate deployment of affordable and sustainable renewable thermal technologies. As renewable thermal buyers aiming to reduce our [GHG] emissions, we need access to cost-effective, responsibly sourced, renewable and lower-carbon thermal energy solutions, including biomass, biogas, geothermal, landfill gas, renewable natural gas or biomethane, beneficial electrification, green hydrogen, solar thermal, and more."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Southern Gas Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Provides learning opportunities for personal and professional growth for individuals in the natural gas industry.

"We'll explore different terminology used to define climate change, including global warming, and discover how natural gas has helped reduce overall carbon dioxide emissions. We're not working to convince anyone one way or another, but it is important to be able to have a conversation, ask questions, and provide relevant information for how natural gas is helping to solve some of our climate challenges."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify Think Microgrid

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Think Microgrid is a collaborative initiative dedicated to education of and outreach to key stakeholders in the microgrid policy and regulatory community. Think Microgrid will support the development of the microgrid industry by focused collaboration of leading companies who recognize the need to coordinate constructive public policy discussions and public affairs communications campaigns."

"The effects of climate change are already upon us and are expected to accelerate. Meanwhile, our society's dependence on electricity grows. The urgency of the situation demands a new approach—one where policymakers focus not only on reducing emissions but also on preparing for climate disaster.... It is time to chart a new course, one that allows our communities to prepare for the climate challenges ahead."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

US Chamber of Commerce

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"Business organization representing the interests of more than 3 million businesses of all sizes, sectors, and regions. Seeks to advocate, connect, inform, and fight for business growth and America's success."

"The Chamber's Position – The climate is changing and humans are contributing to these changes. We believe that there is much common ground on which all sides of this discussion could come together to address climate change with policies that are practical, flexible, predictable, and durable. We believe in a policy approach that acknowledges the costs of action and inaction and the competitiveness of the U.S. economy."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
United States Nuclear Industry Council

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

US NIC's mission is to advance the development and implementation of new nuclear technology and services to secure the U.S. economic supply chain in America and abroad.

"USNIC's vision is to advance nuclear energy to be established, recognized, and accepted world-wide as an essential baseload, emissions-free, reliable, and clean energy source."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Utility Solid Waste Activities Group

Is your organization's position on climate change consistent with theirs?

Unknown

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"USWAG is responsible for addressing waste, by-product and chemical management and transportation issues on behalf of the utility industry. USWAG's core mission is to support the industry's efforts to comply with federal environmental regulations, protect the environment and serve its customers."

No climate statements on public web site. "USWAG advocates for efficient policy for all environmental issues, including climate-related concerns, seeking to balance costs and benefits in a manner protective of energy reliability, security, affordability and resilience. Some USWAG positions in public comments may be perceived as not fully aligning with some views of required timing objectives for the ongoing clean energy transition."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Utility Water Act Group

Is your organization's position on climate change consistent with theirs?

Unknown

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"UWAG is a voluntary, ad hoc, non-profit, unincorporated group formed in 1973 to obtain legal advice and representation on regulatory matters arising under the Clean Water Act and other relevant statutes including, but not limited to, the Safe Drinking Water Act, the Endangered Species Act, and the National Environmental Policy Act."

No climate statements on public web site. UWAG advocates for efficient policy for all environmental issues, including climate-related concerns, seeking to balance costs and benefits in a manner protective of energy reliability, security, affordability and resilience. Some UWAG positions in public comments may be perceived as not fully aligning with some views of required timing objectives for the ongoing clean energy transition.

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify
Zero Emissions Transportation Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"ZETA is the first industry-backed coalition of its kind advocating for the full adoption of electric vehicles (EV) by 2030, which will create hundreds of thousands of new jobs, secure American global EV manufacturing leadership, dramatically improve public health and significantly reduce carbon pollution."

"ZETA looks forward to working with President-elect Biden and Congress to cultivate a strong clean transportation sector and accelerate the transition to EVs."

Southern Company participates in trade associations that cover a variety of issues, including climate change. On climate, some associations have stated policy positions and others do not. Southern Company reviews public statements, positions, and missions of the associations to assess, among other things, whether the association is aligned with our net zero goal. Given the breadth of business issues on which these association are engaged, we do not always agree with or endorse all policy positions taken. Our engagement in these associations is guided by our commitment to our net zero goal and our alignment with the Paris Agreement, and we actively share those perspectives with the associations in which we are members.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding



Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Alliance to Save Energy

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Alliance to Save Energy focuses on using energy more productively to achieve economic growth, a cleaner environment and greater energy security, affordability and reliability. Includes 50X50 Transportation Initiative.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding



American Conservation Coalition

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

ACC's stated mission: Building the conservative environmental movement. ACC is dedicated to mobilizing young people around environmental action through market-based approaches and believes that economic and environmental success can go hand-in-hand.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

American Gas Foundation

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

AGF is an organization focused on being an independent source of information research and programs on energy and environmental issues that affect public policy, with a particular emphasis on natural gas. AGF funds independent, critical research that can be used by policy experts, government officials, the media and others to help formulate fact-based energy policies.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues



can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Non-profit corporation

State the organization to which you provided funding

Bipartisan Policy Center

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

The Bipartisan Policy Center is a non-profit organization that combines the best ideas from both parties to promote health, security, and opportunity for all Americans.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit organization

State the organization to which you provided funding

Center for Climate and Energy Solutions



Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"C2ES is an independent, nonpartisan, nonprofit organization working on practical solutions to climate change. C2ES' missions is to advance policy and action to reduce GHG emissions, promote and accelerate the clean energy transition, strengthen adaptation and resilience to climate impacts, and facilitate the necessary financial investments to do so. A key objective is a national market-based program to reduce emissions cost-effectively. C2ES believes a sound climate strategy is essential to ensure a strong, sustainable economy."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Center for Transportation and the Environment

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"Develops, promotes, and implements advanced transportation technologies, vehicles, and fuels that reduce environmental pollution and fossil fuel dependency."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic



development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Electric Power Research Institute Inc.

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"Nonprofit organization for public interest energy and environmental research focused on electricity generation, delivery, and use in collaboration with the electricity sector, its stakeholders and others to enhance the quality of life by making electric power safe, reliable, affordable, and environmentally responsible."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Non-profit corporation

State the organization to which you provided funding

Gas Technology Institute



Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"Research institute dedicated to expanding the supply of affordable natural gas and renewable energy, ensuring a safe and reliable energy delivery infrastructure, promoting the clean and efficient use of energy resources, and reducing carbon emissions."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Midwest Energy Efficiency Alliance

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"MEEA is a collaborative network advancing energy efficiency in the Midwest for sustainable economic development and environmental stewardship. Highlights importance of energy efficiency."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.



Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Renewable Energy Wildlife Institute

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"REWI is a research collaborative with funders from the renewable industry and eNGOs. REWI's mission is to facilitate timely and responsible development of wind and solar energy while protecting wildlife and wildlife habitat. Formerly American Wind Wildlife Institute. Focused on mitigation of wildlife impacts from renewable energy development. No activities or statements contrary to Paris Agreement objectives or Southern Company policy."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Non-profit organization

State the organization to which you provided funding

Resources for the Future

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)



Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

RFF is an independent, nonprofit research institution whose mission is to improve environmental, energy, and natural resource decisions through impartial economic research and policy engagement.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Smart Electric Power Alliance

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"Mission is to facilitate the electric power industry's smart transition to a clean and modern energy future through education, research, standards and collaboration. Goal is carbon-free energy system by 2050."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.



Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Smart Energy Consumer Collaborative

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

SECC serves as a source of information on consumers' views of grid modernization, and energy delivery and usage, and helps consumers understand the benefits of smart energy.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Southeast Energy Efficiency Alliance

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)



Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

"SEEA is one of six regional energy efficiency organizations. SEEA provides regional context and technical expertise to advance energy efficiency policy. SEEA serves as a resource to state energy offices, public service commissions, environmental agencies and other state-based stakeholders, providing technical expertise on priority issue areas within our states."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Southeastern Wind Coalition

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

The Southeastern Wind Coalition is a non-profit that works to advance the wind industry in the Southeast. The Coalition focuses on land-based wind, offshore wind, wind imports, and the industry's supply chain. Its mission is to advance the wind industry in ways that result in net economic benefits to utilities, citizens, and ratepayers."

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.



Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify
Non-profit corporation

State the organization to which you provided funding

Warrior Tombigbee Waterway Association

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

WTWA promotes and maintains a program for the continued improvement of the Warrior-Tombigbee-Mobile Waterway System for development of navigation, flood control, water supply, hydropower and economic development. No public climate statements on web site.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Coalition

State the organization to which you provided funding

Downstream Natural Gas Initiative

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)



Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Coalition of natural gas utilities collaborating to build a shared vision for the role of utilities and the gas distribution network in the transition to a low-carbon future. DSI is focused on opportunities to leverage the existing infrastructure to support near- and long-term environmental and economic goals, and to address key technical and regulatory challenges related to these goals and opportunities.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Coalition

State the organization to which you provided funding

Natural Allies for a Clean Energy Future

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Natural Allies is a coalition of interested stakeholders that recognize the vital role natural gas and its infrastructure must play in the energy mix.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?



Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Collaborative

State the organization to which you provided funding

Natural Gas Supply Collaborative

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Voluntary collaborative of natural gas purchasers, including natural gas distribution companies and electric generating companies, that are interested in promoting safe and sustainable practices for the supply of natural gas.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization

Other, please specify Collaborative

State the organization to which you provided funding

North America Gas Heat Pump Collaborative

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate



The mission of the Collaborative is to accelerate the adoption of innovative gas technologies that will reduce carbon emissions in North America. The Collaborative was founded in 2022 by a group of 14 gas and dual fuel utilities and energy efficiency program administrators who recognized gas heat pump technologies play an important role in decarbonization. The group works with many partners to implement market transformation activities with the goal of accelerating adoption of gas heat pumps and other technologies that support decarbonization in North America.

Our engagement activities support our business strategies, including, but not limited to, our net zero goal, and are consistent with the goals of the Paris Agreement. The dues can cover a range of topics important to our business and industry, including climate, the environment, land use, research and development, nuclear, taxes, economic development, cybersecurity issues, and securities regulation. To the extent they may impact climate policy we evaluate if the engagement and funding is aligned with our net zero goal and our alignment with the Paris Agreement.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

0 SO 2021 10-K.pdf

Page/Section reference

Southern Company 2021 10-K

https://s27.q4cdn.com/273397814/files/doc_financials/2021/q4/50f6cd27-714e-488e-8e0d-cb05252e273a.pdf

Page 25: Risk Factors

Page 91: Global Climate Issues

Content elements

Risks & opportunities Emissions figures



Emission targets

Comment

Not applicable.

Publication

In mainstream reports

Status

Complete

Attach the document

SO_2021_Annual_Report.pdf

Page/Section reference

Southern Company 2021 Annual Report

https://s27.q4cdn.com/273397814/files/doc_financials/2021/q4/50f6cd27-714e-488e-

8e0d-cb05252e273a.pdf

Page 8: Energy Mix

Page 9: Fleet transition

Page 15: Environmental Strategy and Stewardship

Content elements

Governance

Strategy

Other metrics

Comment

Not applicable.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Page/Section reference

Implementation and Action Toward Net Zero (2020)

https://www.southerncompany.com/content/dam/southerncompany/pdfs/about/governan



ce/reports/Net-zero-report_PDF1.pdf

Planning for a Low-Carbon Future (2018)

https://www.southerncompany.com/content/dam/southerncompany/pdfs/about/governance/reports/Planning-for-a-low-carbon-

future_PDF4.pdf?_ga=2.26907773.1311611349.1628524776-1619408106.1624970233

Content elements

Governance

Emissions figures

Emission targets

Other metrics

Comment

In 2018 we published the Planning for a Low Carbon Future report to outline how we are taking steps to increase disclosure of our preparations for a low-carbon future. In 2020 we published an addendum to the 2018 report titled: Implementation and Action Toward Net Zero. In the recent iteration we provide further insights into how we are tackling these tough issues including setting a net zero carbon goal for our 2050 operations.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

APC_2021SustainabilityReport.pdf

Page/Section reference

2021 Alabama Power Company Sustainability Report https://alabamapowersustainabilityreport.com

Content elements

Other metrics

Comment

In 2022, Alabama Power published a sustainability report to provide company-specific sustainability metrics and ESG-focused information.

Publication

Other, please specify ESG Data

Status



Complete

Attach the document

SO_2022_ESGDataTable.pdf

Page/Section reference

ESG Data Table (2020)

https://www.southerncompany.com/content/dam/southerncompany/pdfs/about/governance/reports/Southern_Company_Data_Download.pdf

EEI ESG/Sustainability Reporting Template (2021)

https://www.southerncompany.com/content/dam/southerncompany/pdfs/about/governance/reports/EEI-ESG-Sustainabilty-Reporting-Template.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

SO_2019-2020_CorporateResponsibilityExecutiveSummary.pdf

Page/Section reference

2019/2020 Corporate Responsibility Executive Summary

https://www.southerncompany.com/content/dam/southerncompany/pdfs/about/governance/reports/Southern_Company_2019-

2020_Corporate_Responsibility_Executive_Summary.pdf

Page 8: Environmental

Content elements

Governance



Strategy

Risks & opportunities

Comment

https://www.southerncompany.com/corporate-responsibility/report-parameters.html Provides the most recent version of the Corporate Responsibility Report and other environmental reports.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Page/Section reference

Ingenuity - Fueling a Sustainable Future https://southerncompanygas.com/news/sustainability/

Content elements

Other metrics

Comment

In 2021, Southern Company Gas published a sustainability report to discuss the legacy of environmental protection and clean energy innovation as well as the current and future path toward net-zero GHG emissions and other sustainability initiatives.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

Board-level oversight and/or executive management-level responsibility for biodiversity-related issues		Description of oversight and objectives relating to biodiversity
Row	Yes, both board-level	As noted on our Environmental Stewardship website, the
1	oversight and executive	Chairman, President, and Chief Executive Officer of Southern
		Company has stated: "Our commitment to protect and conserve



management-level responsibility

our natural resources and support the communities we serve permeates everything we do to provide clean, safe, reliable and affordable energy to millions of customers." Assessment, avoidance, and minimization of company effects on biodiversity, including species and their habitats, is a function of environmental compliance at Southern Company and its affiliates. Environmental compliance is ensured and evaluated at the board level through a robust governance structure. Separately, efforts to preserve and enhance biodiversity within our service territory are demonstrated through our industry leading investment in voluntary conservation and partnering with state and federal wildlife agencies. The strategy for the investments in conservation projects restoring and conserving our natural resources is overseen by executive management. Conservation agreements for specific species are managed by individual operating companies.

Since 2003, Southern Company has supported National Fish and Wildlife Foundation with over \$23 million in contributions to fund the conservation of priority species and their habitats in the Southeast and beyond. The funding, leveraged with \$30.7 million partner and \$146.7 million in grantee matching contributions, has resulted in a conservation impact of more than \$195 million in the communities where we operate. This conservation commitment has helped conserve nearly 3.3 million acres across Southern Company's operating territory. Conservation projects have been awarded under the NFWF Longleaf Landscape Stewardship Fund, Atlantic Flyway Shorebird Initiative, Bats for the Future Fund, Five Star and Urban Waters Restoration Grant Program, and Southeast Aquatics Fund. Through its individual operating companies, Southern Company has partnered with the U.S. Fish and Wildlife Service and state wildlife agencies to protect species within our service territory using conservation agreements like the Candidate Conservation Agreement for the Georgia Aster. Southern Company's commitment to conservation is contributing to measurable impacts for numerous at-risk, listed species and species of conservation concern, including the robust redhorse, red-cockaded woodpecker, gopher tortoise, trispot darter, American oystercatcher, Tulotoma Snail, and Rough Hornsnail.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?



	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	
Row	Yes, we have made public	Adoption of the mitigation hierarchy approach	
1	commitments only	Other, please specify	
		We support hundreds of conservation projects with the National Fish and Wildlife Foundation, and hold several conservation agreements with the U.S. Fish and Wildlife Service and other partners.	

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years	

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row	Yes, we are taking actions to progress our	Land/water protection
1	biodiversity-related commitments	Land/water management
		Species management
		Education & awareness
		Other, please specify
		Habitat management

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Rov	Yes, we use indicators	Other, please specify
1		Southern Company subsidiaries track biodiversity indicators through comprehensive studies, strategic partnerships and implementation of targeted management plans associated with conservation agreements.



C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

response? If so, please attach t			
Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located	
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	2019/2020 Corporate Responsibility Executive Summary Page 13: Additional Environmental: Priorities and Stewardship	
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Implementation and action toward net zero Page 24: Negative Carbon Concepts ① 2	
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	2018 Corporate Responsibility Report Page 49: Environmental Stewardship	
Other, please specify Southern Company Website (Sustainability > Net Zero & Environmental Priorities)	Content of biodiversity- related policies or commitments	Southern Company Website (Sustainability > Net Zero & Environmental Priorities) https://www.southerncompany.com/sustainability/net-zero-and-environmental-priorities.html	
Other, please specify Southern Company Website (Our Community > Environmental Stewardship)	Content of biodiversity-related policies or commitments	Southern Company Website (Our Community > Environmental Stewardship) https://www.southerncompany.com/our- community/environmental-stewardship.html	
Other, please specify Southern Company Website (Our Community > Environmental Stewardship >	Content of biodiversity- related policies or commitments	Southern Company Website (Our Community > Environmental Stewardship > Recovering Species at Risk) https://www.southerncompany.com/our-community/environmental-stewardship/recovering-species-at-risk.html	



Recovering Species at Risk)		
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	2020 EEI ESG/Sustainability Reporting Template Page 4: Reducing Our Environmental Footprint ① 7
Other, please specify Southern Company Website (Our Community > Environmental Stewardship > Conserving Our Environment)	Content of biodiversity- related policies or commitments	Southern Company Website (Our Community > Environmental Stewardship > Conserving Our Environment) https://www.southerncompany.com/our-community/environmental-stewardship/conserving-our-environment.html
Other, please specify Southern Company Website (Our Community > Environmental Stewardship > Reviving a Unique Landscape)	Content of biodiversity- related policies or commitments	Reviving a Unique Landscape Southern Company Website (Our Community > Environmental Stewardship > Reviving a Unique Landscape) https://www.southerncompany.com/our- community/environmental-stewardship/reviving-a-unique- landscape.html
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Alabama Power Company 2021 Sustainability Report https://2021.alabamapowersustainabilityreport.com/Pages 26-31, 37, 40-44
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Alabama Power Company 2021 Sustainability Report https://2020.alabamapowersustainabilityreport.com/
Other, please specify Georgia Power Company Wallace Dam RTE Report	Content of biodiversity-related policies or commitments	Georgia Power Company Website > Wallace Dam > RTE Report https://www.georgiapower.com/content/dam/georgia- power/pdfs/company-pdfs/wallace-dam/Rare-Threatened-and- Endangered-Species-Report-Volume1.pdf U 12
Other, please specify Georgia Power Company Lloyd	Content of biodiversity-related	Georgia Power Company Website > Energy Industry > Generating Plants > Lloyd Shoals Project FERC Relicensing



Shoals Project FERC Relicensing	policies or commitments	https://www.georgiapower.com/content/dam/georgia-power/pdfs/company-pdfs/Lloyd-Shoals-PSP-Part1.pdf
Other, please specify Georgia Power Company Website (Community > Environment)	Content of biodiversity- related policies or commitments	Georgia Power Company Website > Community > Environment https://www.georgiapower.com/community/environment.html

- 1202109_2019-2020_Corporate_Responsibility_Executive_Summary_Page13.pdf
- U 2SO_ImplementationandActionTowardNetZero_September2020.pdf
- ³SO 2018 CorporateResponsibilityReport.pdf
- ⁰ 5SO Website OurCommunity Environmental Stewardship.pdf
- $^{f 0}$ 6 SO_Website_OurCommunity_EnvironmentalStewardship_RecoveringSpeciesatRisk.pdf
- ^U ⁷SO_2021_EEI_ESGSustainabiltyReportingTemplate.pdf
- 9SO Website_OurCommunity_EnvironmentalStewardship_RevivingaUniqueLandscape.pdf
- ¹⁰APC_2021SustainabilityReport.pdf
- ¹¹APC_2020SustainabilityReport.pdf

0

¹²GPC_2016_FERCReport_WallaceDam_RareThreatenedEndangeredSpecies_NoFigures.pdf

- ⁰ ¹³GPC_2018_FERCReport_LloydShoals.pdf
- 14GPC_Website_Community_Environment.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Cautionary Note Regarding Forward-Looking Statements:

Certain information contained in this release is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning GHG reduction goals, including timing of achievement, expected unit retirements, costs related to carbon, expected renewable and carbon free generation growth and capital expenditures. Southern Company cautions that there are certain factors that can cause actual results to differ materially from the forward-looking



information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are outside the control of Southern Company; accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Southern Company's Annual Report on Form 10-K for the year ended December 31, 2021; Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022 and June 30, 2022; and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the impact of recent and future federal and state regulatory changes, as well as changes in application of existing laws and regulations; the potential effects of the continued COVID-19 pandemic; the extent and timing of costs and legal requirements related to coal combustion residuals; current and future litigation or regulatory investigations, proceedings, or inquiries; variations in demand for electricity and natural gas; available sources and costs of natural gas and other fuels and commodities; the ability to control costs and avoid cost and schedule overruns during the development, construction and operation of facilities or other projects; the ability to construct facilities in accordance with the requirements of permits and licenses, to satisfy any environmental performance standards and the requirements of tax credits and other incentives, and to integrate facilities into the Southern Company system upon completion of construction; advances in technology, including the pace and extent of development of low- to no-carbon energy technologies and negative carbon concepts; performance of counterparties under ongoing renewable energy partnerships and development agreements; state and federal rate regulations and the impact of pending and future rate cases and negotiations; the ability to successfully operate the electric utilities' generation, transmission and distribution facilities, Southern Power's generation facilities and Southern Company Gas' natural gas distribution and storage facilities and the successful performance of necessary corporate functions; and the performance of projects undertaken by the non-utility businesses and the success of efforts to invest in and develop new opportunities. Southern Company expressly disclaims any obligation to update any forward-looking information.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category	
Row 1	Chairman, President, and CEO Southern Company	Board chair	

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.



SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges Please explain what would help you overcome these challenges

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

National customers can receive state-specific emission factors by reaching out to their Southern Company national accounts representatives. Local customers can receive state-specific emission factors by reaching out to the marketing representative at each Operating Company. In addition, EEI annually publishes utility emission factors provided by individual utility companies at https://www.eei.org/Pages/CO2Emissions.aspx

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.



SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms